4th grade math worksheets

19 sheets, one of each skill, with the answer keys together from page 21.

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Multi-digit multiplication



Multiply. Start with the ones, and write any tens above the next column.

Name _____ Date _____

1.
$$\begin{array}{r} 173 \\ \times \quad 8 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 497 \\ \times \quad 7 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 365 \\ \times \quad 8 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 551 \\ \times \quad 2 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 134 \\ \times \quad 8 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 203 \\ \times \quad 9 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 702 \\ \times \quad 6 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 956 \\ \times \quad 2 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 682 \\ \times \quad 9 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 917 \\ \times \quad 8 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 141 \\ \times \quad 7 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 118 \\ \times \quad 4 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 287 \\ \times \quad 2 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 333 \\ \times \quad 9 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 202 \\ \times \quad 6 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 486 \\ \times \quad 6 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 681 \\ \times \quad 9 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 276 \\ \times \quad 8 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 549 \\ \times \quad 4 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 515 \\ \times \quad 2 \\ \hline \end{array}$$

Multi-digit multiplication



Multiply by the ones, then by the tens on the next line, starting with a 0. Add the two lines.

Name _____ Date _____

1.

$$\begin{array}{r} 17 \\ \times\ 87 \\ \hline \\ \hline \end{array}$$

2.

$$\begin{array}{r} 49 \\ \times\ 72 \\ \hline \\ \hline \end{array}$$

3.

$$\begin{array}{r} 62 \\ \times\ 19 \\ \hline \\ \hline \end{array}$$

4.

$$\begin{array}{r} 36 \\ \times\ 87 \\ \hline \\ \hline \end{array}$$

5.

$$\begin{array}{r} 55 \\ \times\ 15 \\ \hline \\ \hline \end{array}$$

6.

$$\begin{array}{r} 13 \\ \times\ 82 \\ \hline \\ \hline \end{array}$$

7.

$$\begin{array}{r} 68 \\ \times\ 93 \\ \hline \\ \hline \end{array}$$

8.

$$\begin{array}{r} 91 \\ \times\ 85 \\ \hline \\ \hline \end{array}$$

9.

$$\begin{array}{r} 14 \\ \times\ 67 \\ \hline \\ \hline \end{array}$$

10.

$$\begin{array}{r} 28 \\ \times\ 17 \\ \hline \\ \hline \end{array}$$

11.

$$\begin{array}{r} 33 \\ \times\ 97 \\ \hline \\ \hline \end{array}$$

12.

$$\begin{array}{r} 48 \\ \times\ 66 \\ \hline \\ \hline \end{array}$$

Long division



Divide, multiply, take away, bring down. Write the answer above the line.

Name _____ Date _____

1. $9\overline{)621}$

2. $6\overline{)666}$

3. $2\overline{)708}$

4. $6\overline{)516}$

5. $8\overline{)448}$

6. $7\overline{)203}$

7. $9\overline{)927}$

8. $7\overline{)938}$

9. $4\overline{)232}$

10. $9\overline{)999}$

11. $8\overline{)456}$

12. $5\overline{)875}$

Long division



Divide, multiply, take away, bring down. Write what is left over after R, as 25 R 3.

Name _____ Date _____

1. $9\overline{)590}$

2. $7\overline{)708}$

3. $6\overline{)885}$

4. $9\overline{)989}$

5. $2\overline{)941}$

6. $4\overline{)965}$

7. $8\overline{)499}$

8. $8\overline{)630}$

9. $7\overline{)468}$

10. $5\overline{)374}$

11. $7\overline{)642}$

12. $6\overline{)993}$

Factor pairs

Write every factor pair of each number. Start with 1 and stop when the pairs turn round.

Name _____ Date _____

1. **70** _____
2. **31** _____
3. **98** _____
4. **12** _____
5. **64** _____
6. **20** _____
7. **90** _____
8. **40** _____
9. **84** _____
10. **48** _____
11. **66** _____
12. **78** _____

Prime or composite

Circle P if the number is prime, C if it is composite.

Name _____ Date _____

1.	47	P	C	11.	93	P	C	21.	51	P	C
2.	98	P	C	12.	65	P	C	22.	63	P	C
3.	49	P	C	13.	35	P	C	23.	9	P	C
4.	54	P	C	14.	41	P	C	24.	81	P	C
5.	69	P	C	15.	87	P	C	25.	95	P	C
6.	55	P	C	16.	19	P	C	26.	77	P	C
7.	2	P	C	17.	85	P	C	27.	34	P	C
8.	75	P	C	18.	4	P	C	28.	13	P	C
9.	91	P	C	19.	57	P	C	29.	39	P	C
10.	58	P	C	20.	14	P	C	30.	73	P	C

Number pattern



Use the rule to fill in each table. Where there is no rule, find it first.

Name _____ Date _____

1. **Rule:** add 4

In	0	8	13	17	18
Out	4	12			

2. **Rule:** _____

In	0	3	13	18	20
Out	3	6	16		

3. **Rule:** add 2

In	1	10	13	16	17
Out	3	12			

4. **Rule:** _____

In	1	6	7	10	17
Out	3	8	9		

5. **Rule:** add 6

In	4	6	7	15	16
Out	10	12			

6. **Rule:** _____

In	1	11	12	17	19
Out	7	17	18		

7. **Rule:** multiply by 10

In	2	4	7	9	10
Out	20	40			

8. **Rule:** _____

In	6	8	9	10	13
Out	2	4	5		

Rounding

Round each number to the place named. The next digit to the right decides: 5 or more rounds up.

Name _____ Date _____

1. 66,211 to the nearest 10 _____
2. 41,221 to the nearest 10 _____
3. 939,640 to the nearest 100,000 _____
4. 296,964 to the nearest 10,000 _____
5. 293,825 to the nearest 10 _____
6. 249,945 to the nearest 100,000 _____
7. 29,899 to the nearest 1,000 _____
8. 25,924 to the nearest 10,000 _____
9. 90,215 to the nearest 10 _____
10. 143,743 to the nearest 1,000 _____
11. 48,377 to the nearest 1,000 _____
12. 499,493 to the nearest 10,000 _____
13. 285,336 to the nearest 10 _____
14. 591,821 to the nearest 10 _____
15. 22,943 to the nearest 100 _____
16. 92,759 to the nearest 100 _____
17. 149,230 to the nearest 100,000 _____
18. 31,043 to the nearest 100 _____

Comparing numbers

Write >, < or = in each circle.

Name _____ Date _____

1.	272,114	◯	557,542	2.	45,389 ◯ 661,006
3.	451,757	◯	457,157	4.	100,729 ◯ 162,878
5.	259,835	◯	518,815	6.	418,285 ◯ 418,285
7.	860,523	◯	801,927	8.	834,341 ◯ 188,940
9.	217,223	◯	127,223	10.	169,294 ◯ 169,294
11.	923,051	◯	923,015	12.	115,956 ◯ 347,599
13.	760,911	◯	558,505	14.	485,926 ◯ 426,485
15.	310,164	◯	310,146	16.	91,158 ◯ 280,970
17.	385,818	◯	835,818	18.	318,953 ◯ 644,089
19.	698,826	◯	698,826	20.	761,007 ◯ 774,622
21.	985,115	◯	951,173	22.	905,246 ◯ 937,729
23.	503,984	◯	539,592	24.	407,496 ◯ 473,351

Place value

Write the value of the digit, or write the number in expanded form, as 3,482 = 3,000 + 400 + 80 + 2.

Name _____ Date _____

1. 93,423 = _____
2. Value of 2 in 42,586: _____
3. Value of 9 in 60,906: _____
4. Value of 2 in 29,740: _____
5. 41,805 = _____
6. 65,133 = _____
7. Value of 8 in 17,378: _____
8. 83,991 = _____
9. 37,038 = _____
10. Value of 2 in 20,168: _____
11. Value of 8 in 50,083: _____
12. Value of 8 in 61,872: _____
13. 45,634 = _____
14. Value of 7 in 57,069: _____
15. Value of 8 in 52,598: _____
16. Value of 6 in 74,630: _____
17. 57,211 = _____
18. 86,091 = _____
19. Value of 3 in 70,003: _____
20. Value of 5 in 63,517: _____
21. Value of 1 in 14,385: _____
22. Value of 2 in 52,447: _____
23. Value of 8 in 33,484: _____
24. Value of 5 in 25,781: _____

Multi-digit addition



Add. Start with the ones. When a column makes 10 or more, write the 1 above the next column.

Name _____ Date _____

1.
$$\begin{array}{r} 6305 \\ +\ 2939 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 5073 \\ +\ 7573 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 6318 \\ +\ 8745 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 7598 \\ +\ 2654 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 3486 \\ +\ 1068 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 4552 \\ +\ 8592 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 9527 \\ +\ 3030 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 4982 \\ +\ 3818 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 2550 \\ +\ 4727 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 4235 \\ +\ 7796 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 9132 \\ +\ 4973 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 6120 \\ +\ 7770 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 1559 \\ +\ 2244 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 7599 \\ +\ 2747 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 7483 \\ +\ 3990 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 9258 \\ +\ 1688 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 3070 \\ +\ 9543 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 8277 \\ +\ 3885 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 1310 \\ +\ 9450 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 2996 \\ +\ 2236 \\ \hline \end{array}$$

Multi-digit subtraction



Take away. Start with the ones. When the top digit is smaller, take a ten from the next column.

Name _____ Date _____

1.
$$\begin{array}{r} 4307 \\ -\ 2945 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 1446 \\ -\ 1089 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 9528 \\ -\ 8150 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 1892 \\ -\ 1813 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 8101 \\ -\ 3608 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 1128 \\ -\ 1082 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3412 \\ -\ 1926 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 5112 \\ -\ 2983 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 9401 \\ -\ 8969 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 3851 \\ -\ 1694 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 5140 \\ -\ 4322 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 7077 \\ -\ 1834 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 9248 \\ -\ 5635 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 6212 \\ -\ 5525 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 9771 \\ -\ 5960 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 7023 \\ -\ 6225 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 9388 \\ -\ 4867 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 8570 \\ -\ 1972 \\ \hline \end{array}$$

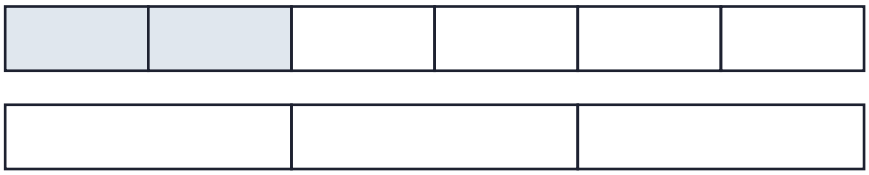
19.
$$\begin{array}{r} 8610 \\ -\ 4942 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 7638 \\ -\ 5440 \\ \hline \end{array}$$

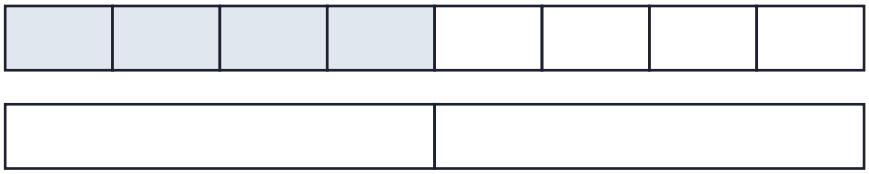
Equivalent fractions

The two bars are the same length. Shade the second bar to match the first, then write the missing number.

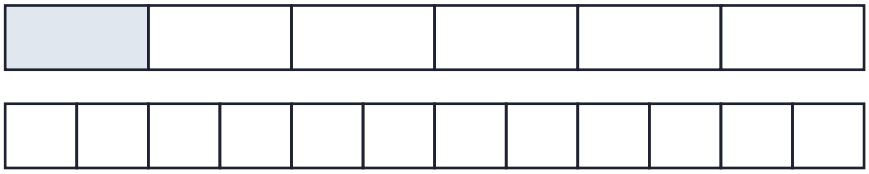
Name _____ Date _____

1. 

$$\frac{2}{6} = \frac{\square}{3}$$

2. 

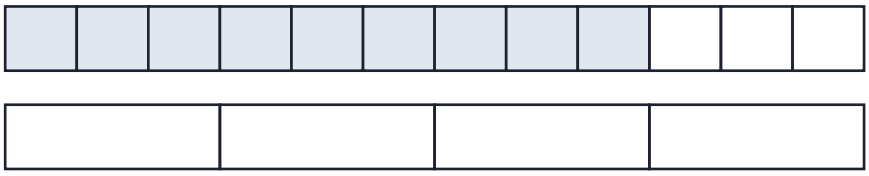
$$\frac{4}{8} = \frac{\square}{2}$$

3. 

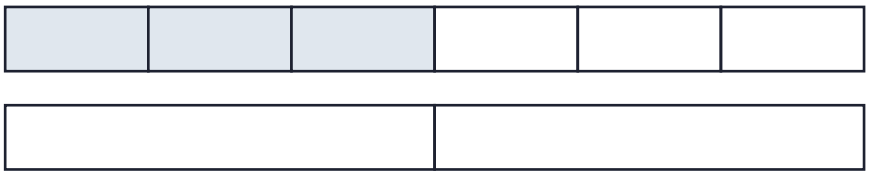
$$\frac{1}{6} = \frac{\square}{12}$$

4. 

$$\frac{1}{5} = \frac{\square}{10}$$

5. 

$$\frac{9}{12} = \frac{\square}{4}$$

6. 

$$\frac{3}{6} = \frac{\square}{2}$$

Equivalent fractions



Write the missing number. Multiply or divide the top and the bottom by the same number.

Name _____ Date _____

1. $\frac{2}{6} = \frac{1}{\square}$

2. $\frac{1}{6} = \frac{\square}{12}$

3. $\frac{2}{6} = \frac{\square}{3}$

4. $\frac{3}{6} = \frac{\square}{2}$

5. $\frac{3}{4} = \frac{9}{\square}$

6. $\frac{8}{10} = \frac{\square}{5}$

7. $\frac{2}{3} = \frac{\square}{6}$

8. $\frac{1}{2} = \frac{\square}{4}$

9. $\frac{3}{12} = \frac{1}{\square}$

10. $\frac{1}{2} = \frac{\square}{8}$

11. $\frac{4}{8} = \frac{1}{\square}$

12. $\frac{3}{4} = \frac{6}{\square}$

13. $\frac{6}{8} = \frac{3}{\square}$

14. $\frac{1}{3} = \frac{2}{\square}$

15. $\frac{2}{3} = \frac{8}{\square}$

16. $\frac{2}{8} = \frac{\square}{4}$

17. $\frac{1}{2} = \frac{2}{\square}$

18. $\frac{4}{6} = \frac{2}{\square}$

19. $\frac{3}{5} = \frac{\square}{10}$

20. $\frac{1}{5} = \frac{\square}{10}$

Adding and subtracting fractions

Add or subtract the top numbers; the bottom number stays the same. Give answers in simplest form.

Name _____ Date _____

1. $\frac{1}{8} + \frac{4}{8} =$

2. $\frac{7}{10} + \frac{7}{10} =$

3. $\frac{4}{5} - \frac{1}{5} =$

4. $\frac{3}{4} - \frac{1}{4} =$

5. $\frac{1}{3} + \frac{1}{3} =$

6. $\frac{1}{6} + \frac{2}{6} =$

7. $\frac{2}{5} + \frac{4}{5} =$

8. $\frac{3}{6} + \frac{3}{6} =$

9. $\frac{2}{6} - \frac{1}{6} =$

10. $\frac{10}{12} - \frac{1}{12} =$

11. $\frac{11}{12} - \frac{9}{12} =$

12. $\frac{3}{4} + \frac{3}{4} =$

13. $\frac{3}{5} + \frac{1}{5} =$

14. $\frac{1}{4} + \frac{3}{4} =$

15. $\frac{3}{6} + \frac{2}{6} =$

16. $\frac{5}{6} - \frac{3}{6} =$

17. $\frac{2}{10} - \frac{1}{10} =$

18. $\frac{2}{12} + \frac{2}{12} =$

19. $\frac{2}{4} + \frac{3}{4} =$

20. $\frac{8}{10} - \frac{5}{10} =$

Multiplying fractions by whole numbers

Multiply the top number by the whole number; the bottom stays the same. Simplest form.

Name _____ Date _____

1. $\frac{1}{4} \times 10 =$
2. $\frac{3}{8} \times 9 =$
3. $\frac{1}{3} \times 3 =$
4. $7 \times \frac{1}{10} =$
5. $5 \times \frac{5}{6} =$
6. $3 \times \frac{3}{10} =$
7. $6 \times \frac{1}{4} =$
8. $\frac{3}{10} \times 9 =$
9. $\frac{5}{8} \times 8 =$
10. $6 \times \frac{4}{5} =$
11. $\frac{1}{2} \times 8 =$
12. $4 \times \frac{1}{12} =$
13. $7 \times \frac{7}{8} =$
14. $4 \times \frac{1}{5} =$
15. $3 \times \frac{1}{5} =$
16. $8 \times \frac{3}{5} =$
17. $\frac{1}{3} \times 4 =$
18. $\frac{2}{5} \times 10 =$
19. $\frac{1}{12} \times 4 =$
20. $\frac{3}{5} \times 6 =$

Line plot

Each X is one thing measured. Read the line plot, then answer the questions.

Name _____ Date _____

1. Pencils in our class



Length in inches

a. How many pencils are 4 inches long?

_____

b. Which length is the most common?

_____

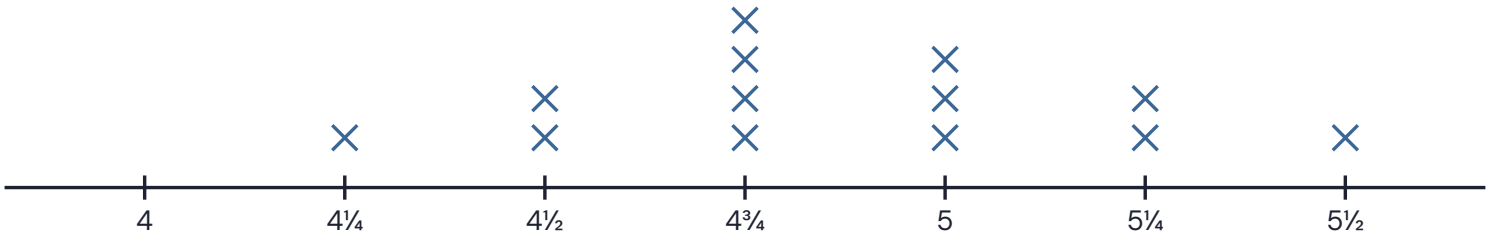
c. How much longer is the longest pencil than the shortest?

_____

d. How many pencils were measured in all?

_____

2. Ribbon pieces for a craft



Length in inches

a. How many ribbons are 5 inches long?

_____

b. Which length is the most common?

_____

c. How much longer is the longest ribbon than the shortest?

_____

d. How many ribbons were measured in all?

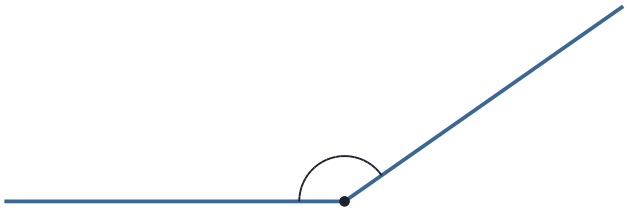
_____

Measuring angles

Measure each angle with a protractor, its centre on the corner and its base line along the flat arm. Then circle acute, right or obtuse.

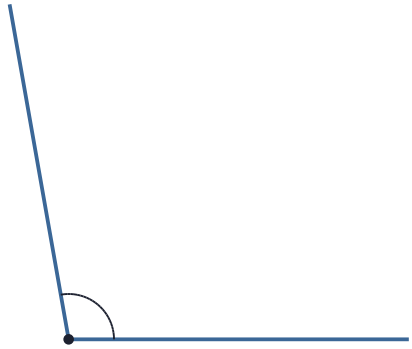
Name _____ Date _____

1.



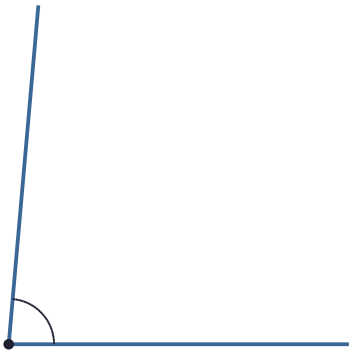
Angle: _____ ° acute right obtuse

2.



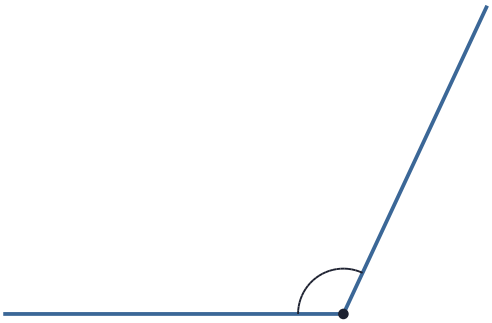
Angle: _____ ° acute right obtuse

3.



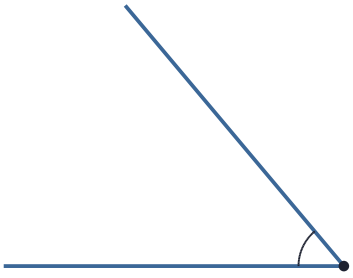
Angle: _____ ° acute right obtuse

4.



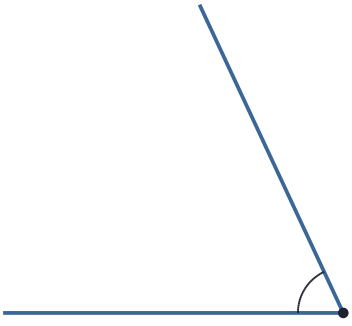
Angle: _____ ° acute right obtuse

5.



Angle: _____ ° acute right obtuse

6.



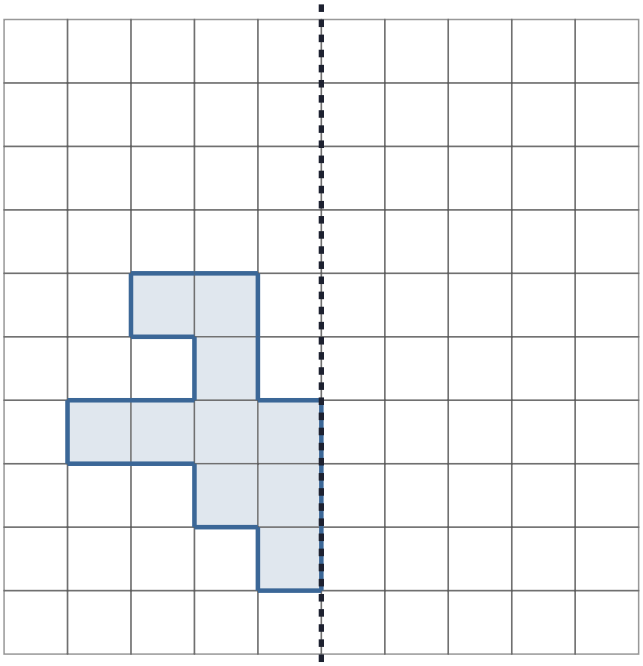
Angle: _____ ° acute right obtuse

Symmetry

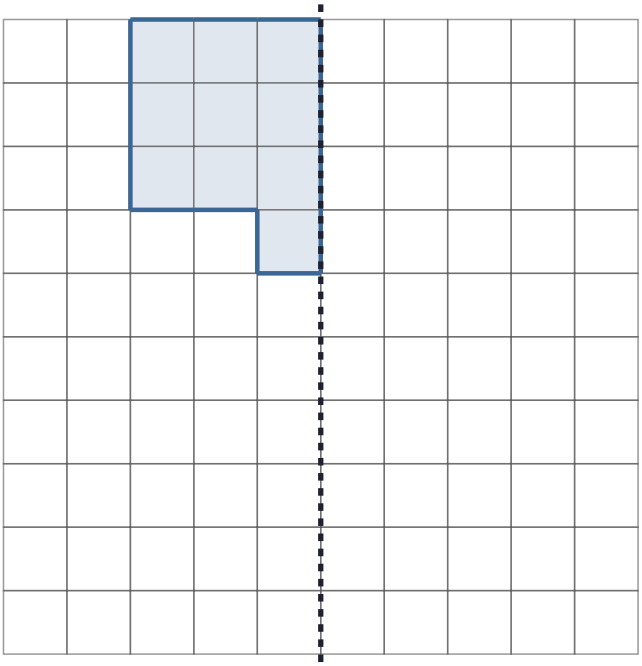
Shade the squares that finish each shape, the same on the other side of the dashed line, as a mirror would show it.

Name _____ Date _____

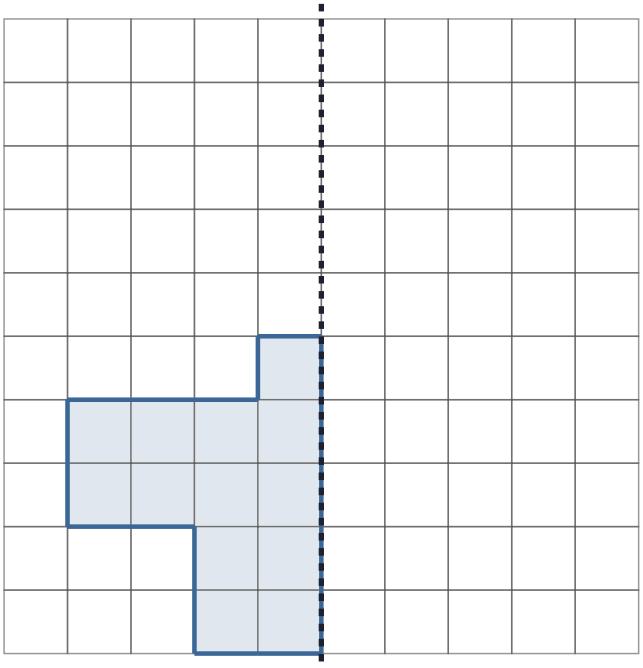
1.



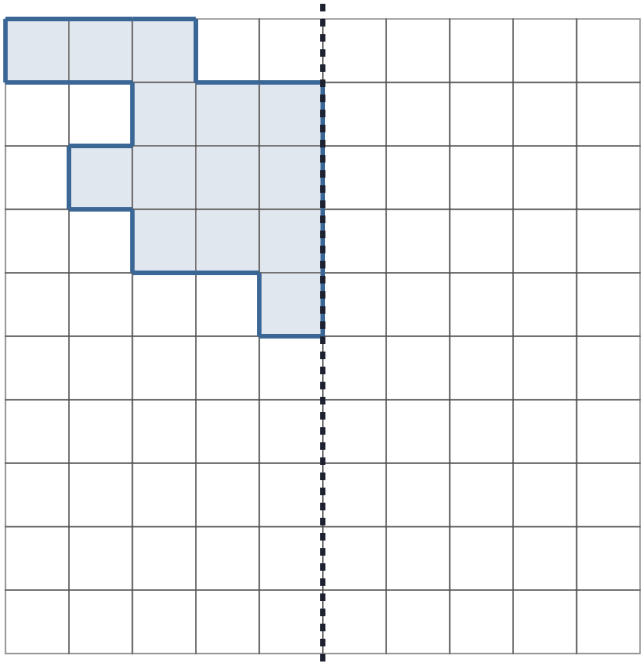
2.



3.



4.



Answer key

Multi-digit multiplication

1. **173 × 8 = 1384**
2. **497 × 7 = 3479**
3. **365 × 8 = 2920**
4. **551 × 2 = 1102**
5. **134 × 8 = 1072**
6. **203 × 9 = 1827**
7. **702 × 6 = 4212**
8. **956 × 2 = 1912**
9. **682 × 9 = 6138**
10. **917 × 8 = 7336**
11. **141 × 7 = 987**
12. **118 × 4 = 472**
13. **287 × 2 = 574**
14. **333 × 9 = 2997**
15. **202 × 6 = 1212**
16. **486 × 6 = 2916**
17. **681 × 9 = 6129**
18. **276 × 8 = 2208**
19. **549 × 4 = 2196**
20. **515 × 2 = 1030**

Answer key

Multi-digit multiplication

1. **17 × 87 = 1479**
2. **49 × 72 = 3528**
3. **62 × 19 = 1178**
4. **36 × 87 = 3132**
5. **55 × 15 = 825**
6. **13 × 82 = 1066**
7. **68 × 93 = 6324**
8. **91 × 85 = 7735**
9. **14 × 67 = 938**
10. **28 × 17 = 476**
11. **33 × 97 = 3201**
12. **48 × 66 = 3168**

Answer key

Long division

1. **621 ÷ 9 = 69**
2. **666 ÷ 6 = 111**
3. **708 ÷ 2 = 354**
4. **516 ÷ 6 = 86**
5. **448 ÷ 8 = 56**
6. **203 ÷ 7 = 29**
7. **927 ÷ 9 = 103**
8. **938 ÷ 7 = 134**
9. **232 ÷ 4 = 58**
10. **999 ÷ 9 = 111**
11. **456 ÷ 8 = 57**
12. **875 ÷ 5 = 175**

Answer key

Long division

1. **590 ÷ 9 = 65 R 5**
2. **708 ÷ 7 = 101 R 1**
3. **885 ÷ 6 = 147 R 3**
4. **989 ÷ 9 = 109 R 8**
5. **941 ÷ 2 = 470 R 1**
6. **965 ÷ 4 = 241 R 1**
7. **499 ÷ 8 = 62 R 3**
8. **630 ÷ 8 = 78 R 6**
9. **468 ÷ 7 = 66 R 6**
10. **374 ÷ 5 = 74 R 4**
11. **642 ÷ 7 = 91 R 5**
12. **993 ÷ 6 = 165 R 3**

Factor pairs: answer key

Each answer in colour, and under it why.

1. **70:** 1 × 70, 2 × 35, 5 × 14, 7 × 10
   Factors: 1, 2, 5, 7, 10, 14, 35, 70
2. **31:** 1 × 31
   31 is prime: its only pair is 1 × 31
3. **98:** 1 × 98, 2 × 49, 7 × 14
   Factors: 1, 2, 7, 14, 49, 98
4. **12:** 1 × 12, 2 × 6, 3 × 4
   Factors: 1, 2, 3, 4, 6, 12
5. **64:** 1 × 64, 2 × 32, 4 × 16, 8 × 8
   8 × 8 is one pair, written once
6. **20:** 1 × 20, 2 × 10, 4 × 5
   Factors: 1, 2, 4, 5, 10, 20
7. **90:** 1 × 90, 2 × 45, 3 × 30, 5 × 18, 6 × 15, 9 × 10
   Factors: 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90
8. **40:** 1 × 40, 2 × 20, 4 × 10, 5 × 8
   Factors: 1, 2, 4, 5, 8, 10, 20, 40
9. **84:** 1 × 84, 2 × 42, 3 × 28, 4 × 21, 6 × 14, 7 × 12
   Factors: 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84
10. **48:** 1 × 48, 2 × 24, 3 × 16, 4 × 12, 6 × 8
    Factors: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
11. **66:** 1 × 66, 2 × 33, 3 × 22, 6 × 11
    Factors: 1, 2, 3, 6, 11, 22, 33, 66
12. **78:** 1 × 78, 2 × 39, 3 × 26, 6 × 13
    Factors: 1, 2, 3, 6, 13, 26, 39, 78

Prime or composite: answer key

Each answer in colour, and under it why.

1. **47: Prime**
   Its only factors are 1 and 47
2. **98: Composite**
   98 = 2 × 49
3. **49: Composite**
   49 = 7 × 7
4. **54: Composite**
   54 = 2 × 27
5. **69: Composite**
   69 = 3 × 23
6. **55: Composite**
   55 = 5 × 11
7. **2: Prime**
   Its only factors are 1 and 2
8. **75: Composite**
   75 = 3 × 25
9. **91: Composite**
   91 = 7 × 13
10. **58: Composite**
    58 = 2 × 29
11. **93: Composite**
    93 = 3 × 31
12. **65: Composite**
    65 = 5 × 13
13. **35: Composite**
    35 = 5 × 7
14. **41: Prime**
    Its only factors are 1 and 41
15. **87: Composite**
    87 = 3 × 29
16. **19: Prime**
    Its only factors are 1 and 19
17. **85: Composite**
    85 = 5 × 17
18. **4: Composite**
    4 = 2 × 2
19. **57: Composite**
    57 = 3 × 19
20. **14: Composite**
    14 = 2 × 7
21. **51: Composite**
    51 = 3 × 17
22. **63: Composite**
    63 = 3 × 21
23. **9: Composite**
    9 = 3 × 3
24. **81: Composite**
    81 = 3 × 27
25. **95: Composite**
    95 = 5 × 19
26. **77: Composite**
    77 = 7 × 11
27. **34: Composite**
    34 = 2 × 17
28. **13: Prime**
    Its only factors are 1 and 13
29. **39: Composite**
    39 = 3 × 13
30. **73: Prime**
    Its only factors are 1 and 73

Answer key

Number pattern

1. **Rule: add 4. Out: 4, 12, 17, 21, 22**
2. **Rule: add 3. Out: 3, 6, 16, 21, 23**
3. **Rule: add 2. Out: 3, 12, 15, 18, 19**
4. **Rule: add 2. Out: 3, 8, 9, 12, 19**
5. **Rule: add 6. Out: 10, 12, 13, 21, 22**
6. **Rule: add 6. Out: 7, 17, 18, 23, 25**
7. **Rule: multiply by 10. Out: 20, 40, 70, 90, 100**
8. **Rule: take away 4. Out: 2, 4, 5, 6, 9**

Rounding: answer key

The answer in colour, after the two numbers it lies between.

1. 66,211 to the nearest 10 66,210 or 66,220? **66,210**
2. 41,221 to the nearest 10 41,220 or 41,230? **41,220**
3. 939,640 to the nearest 100,000 900,000 or 1,000,000? **900,000**
4. 296,964 to the nearest 10,000 290,000 or 300,000? **300,000**
5. 293,825 to the nearest 10 293,820 or 293,830? **293,830**
6. 249,945 to the nearest 100,000 200,000 or 300,000? **200,000**
7. 29,899 to the nearest 1,000 29,000 or 30,000? **30,000**
8. 25,924 to the nearest 10,000 20,000 or 30,000? **30,000**
9. 90,215 to the nearest 10 90,210 or 90,220? **90,220**
10. 143,743 to the nearest 1,000 143,000 or 144,000? **144,000**
11. 48,377 to the nearest 1,000 48,000 or 49,000? **48,000**
12. 499,493 to the nearest 10,000 490,000 or 500,000? **500,000**
13. 285,336 to the nearest 10 285,330 or 285,340? **285,340**
14. 591,821 to the nearest 10 591,820 or 591,830? **591,820**
15. 22,943 to the nearest 100 22,900 or 23,000? **22,900**
16. 92,759 to the nearest 100 92,700 or 92,800? **92,800**
17. 149,230 to the nearest 100,000 100,000 or 200,000? **100,000**
18. 31,043 to the nearest 100 31,000 or 31,100? **31,000**

Comparing numbers: answer key

The answers are in colour.

1. 272,114 < 557,542
2. 45,389 < 661,006
3. 451,757 < 457,157
4. 100,729 < 162,878
5. 259,835 < 518,815
6. 418,285 = 418,285
7. 860,523 > 801,927
8. 834,341 > 188,940
9. 217,223 > 127,223
10. 169,294 = 169,294
11. 923,051 > 923,015
12. 115,956 < 347,599
13. 760,911 > 558,505
14. 485,926 > 426,485
15. 310,164 > 310,146
16. 91,158 < 280,970
17. 385,818 < 835,818
18. 318,953 < 644,089
19. 698,826 = 698,826
20. 761,007 < 774,622
21. 985,115 > 951,173
22. 905,246 < 937,729
23. 503,984 < 539,592
24. 407,496 < 473,351

Answer key

Place value

1. 90,000 + 3,000 + 400 + 20 + 3
2. 2,000
3. 900
4. 20,000
5. 40,000 + 1,000 + 800 + 5
6. 60,000 + 5,000 + 100 + 30 + 3
7. 8
8. 80,000 + 3,000 + 900 + 90 + 1
9. 30,000 + 7,000 + 30 + 8
10. 20,000
11. 80
12. 800
13. 40,000 + 5,000 + 600 + 30 + 4
14. 7,000
15. 8
16. 600
17. 50,000 + 7,000 + 200 + 10 + 1
18. 80,000 + 6,000 + 90 + 1
19. 3
20. 500
21. 10,000
22. 2,000
23. 80
24. 5,000

Answer key

Multi-digit addition

1. **6305 + 2939 = 9244**
2. **5073 + 7573 = 12646**
3. **6318 + 8745 = 15063**
4. **7598 + 2654 = 10252**
5. **3486 + 1068 = 4554**
6. **4552 + 8592 = 13144**
7. **9527 + 3030 = 12557**
8. **4982 + 3818 = 8800**
9. **2550 + 4727 = 7277**
10. **4235 + 7796 = 12031**
11. **9132 + 4973 = 14105**
12. **6120 + 7770 = 13890**
13. **1559 + 2244 = 3803**
14. **7599 + 2747 = 10346**
15. **7483 + 3990 = 11473**
16. **9258 + 1688 = 10946**
17. **3070 + 9543 = 12613**
18. **8277 + 3885 = 12162**
19. **1310 + 9450 = 10760**
20. **2996 + 2236 = 5232**

Answer key

Multi-digit subtraction

1. **4307 - 2945 = 1362**
2. **1446 - 1089 = 357**
3. **9528 - 8150 = 1378**
4. **1892 - 1813 = 79**
5. **8101 - 3608 = 4493**
6. **1128 - 1082 = 46**
7. **3412 - 1926 = 1486**
8. **5112 - 2983 = 2129**
9. **9401 - 8969 = 432**
10. **3851 - 1694 = 2157**
11. **5140 - 4322 = 818**
12. **7077 - 1834 = 5243**
13. **9248 - 5635 = 3613**
14. **6212 - 5525 = 687**
15. **9771 - 5960 = 3811**
16. **7023 - 6225 = 798**
17. **9388 - 4867 = 4521**
18. **8570 - 1972 = 6598**
19. **8610 - 4942 = 3668**
20. **7638 - 5440 = 2198**

Answer key

Equivalent fractions

1. **2/6 = 1/3**
2. **4/8 = 1/2**
3. **1/6 = 2/12**
4. **1/5 = 2/10**
5. **9/12 = 3/4**
6. **3/6 = 1/2**

Answer key

Equivalent fractions

1. **2/6 = 1/3**
2. **1/6 = 2/12**
3. **2/6 = 1/3**
4. **3/6 = 1/2**
5. **3/4 = 9/12**
6. **8/10 = 4/5**
7. **2/3 = 4/6**
8. **1/2 = 2/4**
9. **3/12 = 1/4**
10. **1/2 = 4/8**
11. **4/8 = 1/2**
12. **3/4 = 6/8**
13. **6/8 = 3/4**
14. **1/3 = 2/6**
15. **2/3 = 8/12**
16. **2/8 = 1/4**
17. **1/2 = 2/4**
18. **4/6 = 2/3**
19. **3/5 = 6/10**
20. **1/5 = 2/10**

Adding and subtracting fractions: answer key

Each answer in colour, with the working before it.

1. $\frac{1}{8} + \frac{4}{8} = \frac{5}{8}$

2. $\frac{7}{10} + \frac{7}{10} = \frac{14}{10} = \frac{7}{5} = 1\frac{2}{5}$

3. $\frac{4}{5} - \frac{1}{5} = \frac{3}{5}$

4. $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$

5. $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

6. $\frac{1}{6} + \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$

7. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$

8. $\frac{3}{6} + \frac{3}{6} = \frac{6}{6} = 1$

9. $\frac{2}{6} - \frac{1}{6} = \frac{1}{6}$

10. $\frac{10}{12} - \frac{1}{12} = \frac{9}{12} = \frac{3}{4}$

11. $\frac{11}{12} - \frac{9}{12} = \frac{2}{12} = \frac{1}{6}$

12. $\frac{3}{4} + \frac{3}{4} = \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$

13. $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$

14. $\frac{1}{4} + \frac{3}{4} = \frac{4}{4} = 1$

15. $\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

16. $\frac{5}{6} - \frac{3}{6} = \frac{2}{6} = \frac{1}{3}$

17. $\frac{2}{10} - \frac{1}{10} = \frac{1}{10}$

18. $\frac{2}{12} + \frac{2}{12} = \frac{4}{12} = \frac{1}{3}$

19. $\frac{2}{4} + \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4}$

20. $\frac{8}{10} - \frac{5}{10} = \frac{3}{10}$

Multiplying fractions by whole numbers: answer key

Each answer in colour, with the working before it.

1. $\frac{1}{4} \times 10 = \frac{10}{4} = \frac{5}{2} = 2\frac{1}{2}$
2. $\frac{3}{8} \times 9 = \frac{27}{8} = 3\frac{3}{8}$
3. $\frac{1}{3} \times 3 = \frac{3}{3} = 1$
4. $7 \times \frac{1}{10} = \frac{7}{10}$
5. $5 \times \frac{5}{6} = \frac{25}{6} = 4\frac{1}{6}$
6. $3 \times \frac{3}{10} = \frac{9}{10}$
7. $6 \times \frac{1}{4} = \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$
8. $\frac{3}{10} \times 9 = \frac{27}{10} = 2\frac{7}{10}$
9. $\frac{5}{8} \times 8 = \frac{40}{8} = 5$
10. $6 \times \frac{4}{5} = \frac{24}{5} = 4\frac{4}{5}$
11. $\frac{1}{2} \times 8 = \frac{8}{2} = 4$
12. $4 \times \frac{1}{12} = \frac{4}{12} = \frac{1}{3}$
13. $7 \times \frac{7}{8} = \frac{49}{8} = 6\frac{1}{8}$
14. $4 \times \frac{1}{5} = \frac{4}{5}$
15. $3 \times \frac{1}{5} = \frac{3}{5}$
16. $8 \times \frac{3}{5} = \frac{24}{5} = 4\frac{4}{5}$
17. $\frac{1}{3} \times 4 = \frac{4}{3} = 1\frac{1}{3}$
18. $\frac{2}{5} \times 10 = \frac{20}{5} = 4$
19. $\frac{1}{12} \times 4 = \frac{4}{12} = \frac{1}{3}$
20. $\frac{3}{5} \times 6 = \frac{18}{5} = 3\frac{3}{5}$

Answer key

Line plot

1. Pencils in our class

a. 2

b. 4¼ inches

c. 1¼ inches

d. 12

2. Ribbon pieces for a craft

a. 3

b. 4¾ inches

c. 1¼ inches

d. 13

Answer key

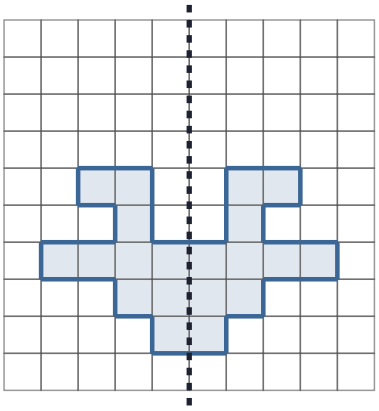
Measuring angles

1. **145°, obtuse**
2. **100°, obtuse**
3. **85°, acute**
4. **115°, obtuse**
5. **50°, acute**
6. **65°, acute**

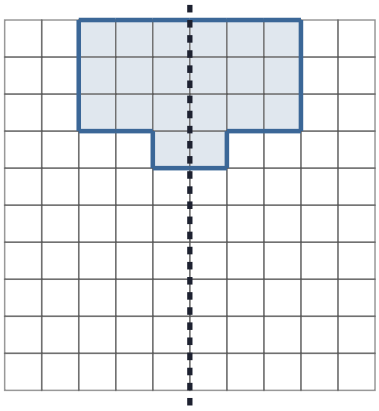
Answer key

Symmetry

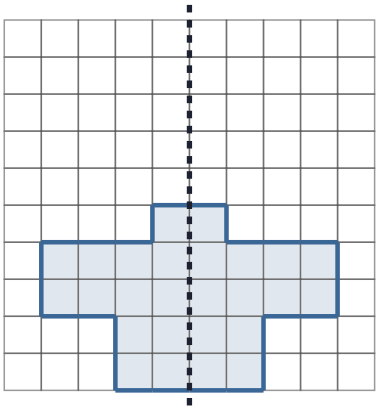
1.



2.



3.



4.

