Percent increase and decrease

Percent change is the change divided by the starting amount, times 100.

Name _____ Date _____

1. Decrease 180 by 10%.
2. Increase 220 by 10%.
3. Decrease 160 by 15%.
4. Percent decrease from 120 to 96?
5. Percent decrease from 64 to 32?
6. Percent increase from 164 to 246?
7. Increase 200 by 75%.
8. Percent increase from 10 to 20?
9. Percent decrease from 460 to 368?
10. Percent increase from 60 to 63?
11. Increase 80 by 75%.
12. Percent increase from 340 to 442?
13. Percent increase from 60 to 72?
14. Decrease 20 by 10%.
15. Percent decrease from 20 to 17?
16. Percent decrease from 52 to 26?
17. Percent decrease from 92 to 69?
18. Increase 160 by 5%.
19. Percent increase from 15 to 30?
20. Decrease 145 by 40%.

Percent increase and decrease: answer key

Each answer in colour, with the working before it.

1. 10% of 180 = 18; 180 − 18 = 162
2. 10% of 220 = 22; 220 + 22 = 242
3. 15% of 160 = 24; 160 − 24 = 136
4. 120 − 96 = 24; 24 ÷ 120 = 0.2; 0.2 × 100 = 20%
5. 64 − 32 = 32; 32 ÷ 64 = 0.5; 0.5 × 100 = 50%
6. 246 − 164 = 82; 82 ÷ 164 = 0.5; 0.5 × 100 = 50%
7. 75% of 200 = 150; 200 + 150 = 350
8. 20 − 10 = 10; 10 ÷ 10 = 1; 1 × 100 = 100%
9. 460 − 368 = 92; 92 ÷ 460 = 0.2; 0.2 × 100 = 20%
10. 63 − 60 = 3; 3 ÷ 60 = 0.05; 0.05 × 100 = 5%
11. 75% of 80 = 60; 80 + 60 = 140
12. 442 − 340 = 102; 102 ÷ 340 = 0.3; 0.3 × 100 = 30%
13. 72 − 60 = 12; 12 ÷ 60 = 0.2; 0.2 × 100 = 20%
14. 10% of 20 = 2; 20 − 2 = 18
15. 20 − 17 = 3; 3 ÷ 20 = 0.15; 0.15 × 100 = 15%
16. 52 − 26 = 26; 26 ÷ 52 = 0.5; 0.5 × 100 = 50%
17. 92 − 69 = 23; 23 ÷ 92 = 0.25; 0.25 × 100 = 25%
18. 5% of 160 = 8; 160 + 8 = 168
19. 30 − 15 = 15; 15 ÷ 15 = 1; 1 × 100 = 100%
20. 40% of 145 = 58; 145 − 58 = 87