

ANSWER PRESENTATION TOOL

Green - Student Edition

5

Chapter Rev

1-22

ALL EVEN





Show Solu

ODD

- 1. The ratio of butterflies to caterpillars is 3 to 2, or $3 : 2$.
The ratio means that there are 3 butterflies for every 2 caterpillars.**

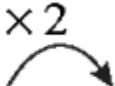
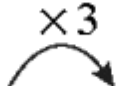


- 2. The ratio of saxophones to trumpets is 6 to 3, or $6 : 3$.
The ratio means that there are 6 saxophones for every 3 trumpets.**

3.

	$+6$	$+6$	
			
Levers	6	12	18
Pulleys	3	6	9
			
	$+3$	$+3$	



The equivalent ratios are $6 : 3$, $12 : 6$, and $18 : 9$.

4.

	$\times 2$	$\times 3$	
			
Cars	3	6	18
Trucks	4	8	24
			
	$\times 2$	$\times 3$	


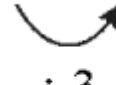
The equivalent ratios are 3 : 4, 6 : 8, and 18 : 24.

5.

	$\div 4$	
		
Stunts	12	3
Movies	4	1
		
	$\div 4$	

The unit rate is 3 stunts per movie.

6.

	$\div 3$	
		
Stitches	3600	1200
Time (minutes)	3	1
		
	$\div 3$	

The unit rate is 1200 stitches per minute.

7.

		$\div 4$	$\times 30$
Beats	28	7	210
Time (seconds)	4	1	30
		$\div 4$	$\times 30$

There are 210 beats in 30 seconds.

8. 5-ounce can

		$\div 5$
Cost (dollars)	0.90	0.18
Weight (ounces)	5	1
		$\div 5$

The unit rate for the 5-ounce can is \$0.18 per ounce.

12-ounce can

		$\div 12$
Cost (dollars)	2.40	0.20
Weight (ounces)	12	1
		$\div 12$

The unit rate for the 12-ounce can is \$0.20 per ounce.

The 5-ounce can is the better buy because it has a smaller unit rate.

$$9. 12\% = \frac{12}{100} = \frac{3}{25}$$

$$10. 88\% = \frac{88}{100} = \frac{22}{25}$$

$$11. 0.8\% = \frac{0.8}{100} = \frac{8}{1000} = \frac{1}{125}$$

$$12. \frac{3}{5} = \frac{3 \times 20}{5 \times 20} = \frac{60}{100} = 60\%$$

$$13. \frac{43}{25} = \frac{43 \times 4}{25 \times 4} = \frac{172}{100} = 172\%$$

$$14. 1\frac{21}{50} = \frac{71}{50} = \frac{71 \times 2}{50 \times 2} = \frac{142}{100} = 142\%$$

$$15. \text{Sample answer: } 60\% \text{ of } 80 = \frac{3}{5} \times 80 = \frac{3 \times \overset{16}{\cancel{80}}}{\underset{1}{\cancel{5}}} = 48$$

So, 60% of 80 is 48.

Write the percent as a fraction. Then multiply by the whole to find the part. Simplify the result.

16. Sample answer: $80\% \text{ of } 55 = \frac{4}{5} \times 55 = \frac{4 \times \overset{11}{\cancel{55}}}{\cancel{5}_1} = 44$

So, 80% of 55 is 44.

Write the percent as a fraction. Then multiply by the whole to find the part. Simplify the result.

17. Sample answer:

$$150\% \text{ of } 48 = \frac{3}{2} \times 48 = \frac{3 \times \overset{24}{\cancel{48}}}{\cancel{2}_1} = 72$$

So, 150% of 48 is 72.

Write the percent as a fraction. Then multiply by the whole to find the part. Simplify the result.

18. Sample answer:

$$35 \div \frac{70}{100} = 35 \times \frac{100}{70} = \frac{\overset{1}{\cancel{35}} \times \overset{50}{\cancel{100}}}{\cancel{70}_1} = 50$$

So, 70% of 50 is 35.

Write the percent as a fraction. Then divide the part by the percent to find the whole. Simplify the result.

19. *Sample answer:*

$$56 \div \frac{140}{100} = 56 \times \frac{100}{140} = \frac{\overset{2}{\cancel{56}} \times \overset{20}{\cancel{100}}}{\cancel{140}} = 40$$

1

So, 140% of 40 is 56.

Write the percent as a fraction. Then divide the part by the percent to find the whole. Simplify the result.

$$\mathbf{20.} \quad 3 \cancel{\text{L}} \times \frac{1 \text{ qt}}{0.95 \cancel{\text{L}}} \approx 3.16 \text{ qt}$$

So, 3 L \approx 3.16 qt.

$$\mathbf{21.} \quad 9.2 \cancel{\text{in.}} \times \frac{2.54 \text{ cm}}{1 \cancel{\text{in.}}} \approx 23.37 \text{ cm}$$

So, 9.2 in. \approx 23.37 cm

$$\mathbf{22.} \quad 15 \cancel{\text{lb}} \times \frac{0.45 \text{ kg}}{1 \cancel{\text{lb}}} \approx 6.75 \text{ kg}$$

So, 15 lb \approx 6.75 kg.