



Answer Key: page 3

Ratios and Proportions

1. $\frac{1}{4} = \frac{x}{32}$

2. $\frac{y}{65} = \frac{3}{5}$

3. $\frac{15}{10} = \frac{3}{t}$

4. $\frac{12}{18} = \frac{4}{y}$

5. $\frac{20}{3} = \frac{5}{h}$

6. $\frac{56}{w} = \frac{7}{42}$

7. $\frac{18}{v} = \frac{6}{0.8}$

8. $\frac{4}{64} = \frac{0.7}{x}$

9. $\frac{5}{3/7} = \frac{28}{y}$

10. $\frac{25p}{12} = \frac{5}{6}$

Solve the following percent problems

11. *What is 50% of 90?*

12. *What is 25% of 32?*

13. *What is 75% of 94?*

14. *What is 30% of 330?*

15. *What is 94% of 50?*

16. *What is 8% of 650?*
17. *What is 125% of 6?*
18. *What is 25% of 3.24?*
19. *What is 2.5% of 90?*
20. *50% of what number is 26?*
21. *25% of what number is 110?*
22. *40% of what number is 60?*
23. *2% of what number is 1?*
24. *37.5% of what number is 13.2?*
25. *0.6% of what number is 0.3?*
26. *What percent of 200 is 120?*
27. *What percent of 16 is 20?*
28. *45 is what percent of 300?*
29. *132 is what percent of 550?*

Simplifying Rational Expressions

30. $\frac{6(x-5y)}{4(x-5y)}$

31. $\frac{9y}{21(y+3)}$

32. $\frac{(t+3)(t-6)}{t^2(t+3)}$

33. $\frac{x}{x^2+x}$

34. $\frac{7h^2+14}{7}$

35. $\frac{10x+20y}{10x-30y}$

ANSWER KEY

Ratios and Proportions

1. $\frac{1}{4} = \frac{x}{32}$ **8**

2. $\frac{y}{65} = \frac{3}{5}$ **39**

3. $\frac{15}{10} = \frac{3}{t}$ **2**

4. $\frac{12}{18} = \frac{4}{y}$ **6**

5. $\frac{20}{3} = \frac{5}{h}$ **3/4**

6. $\frac{56}{w} = \frac{7}{42}$ **336**

7. $\frac{18}{v} = \frac{6}{0.8}$ **2.4**

8. $\frac{4}{64} = \frac{0.7}{x}$ **11.2**

9. $\frac{5}{3/7} = \frac{28}{y}$ **12/5**

10. $\frac{25p}{12} = \frac{5}{6}$ **2/5**

Solve the following percent problems

11. *What is 50% of 90?* **45**

12. *What is 25% of 32?* **8**

13. *What is 75% of 94?* **70.5**

14. *What is 30% of 330?* **99**

15. *What is 94% of 50?* **47**
16. *What is 8% of 650?* **52**
17. *What is 125% of 6?* **7.5**
18. *What is 25% of 3.24?* **.81**
19. *What is 2.5% of 90?* **2.25**
20. *50% of what number is 26?* **52**
21. *25% of what number is 110?* **440**
22. *40% of what number is 60?* **150**
23. *2% of what number is 1?* **50**
24. *37.5% of what number is 13.2?* **35.2**
25. *0.6% of what number is 0.3?* **50**
26. *What percent of 200 is 120?* **60%**
27. *What percent of 16 is 20?* **125%**
28. *45 is what percent of 300?* **15%**
29. *132 is what percent of 550?* **24%**

Simplifying Rational Expressions

30. $\frac{6(x-5y)}{4(x-5y)}$ **$\frac{3}{2}$**

31. $\frac{9y}{21(y+3)}$ **$\frac{3y}{7(y+3)}$**

32. $\frac{(t+3)(t-6)}{t^2(t+3)}$ **$\frac{t-6}{t^2}$**

33. $\frac{x}{x^2+x}$ $\frac{1}{x+1}$

34. $\frac{7h^2+14}{7}$ $h^2 + 2$

35. $\frac{10x+20y}{10x-30y}$ $\frac{x+2y}{x-3y}$