

is over of = percent over 100

$$\frac{15}{of} = \frac{\%}{100}$$

If a student gets 8 questions out of 15 correct. What is their grade, in percent?

$$\frac{8}{15} = \frac{x}{100}$$

$$\frac{800}{15} = \frac{15x}{15}$$

$$53.3\% = x$$

If a student makes an 85% on a test. How many questions did he answer correctly out of 35?

$$\frac{x}{35} = \frac{85}{100}$$

$$100x = 2975$$

$$x = 29.75$$

Study Guide

$$1.) \quad \frac{4}{5} = \frac{6}{x}$$

$$4x = 5(6)$$

$$4x = 30$$

$$x = 7.5$$

$$2.) \quad \frac{x+2}{5} = \frac{6}{11}$$

$$11(x+2) = 5(6)$$

$$11x + 22 = 30$$

$$-22 \quad -22$$

$$11x = 8$$

$$x = 0.\overline{72}$$

$$\textcircled{5} \quad \frac{8}{w+10} = \frac{4}{2w-7}$$

$$8(2w-7) = 4(w+10)$$

$$16w - 56 = \cancel{4w} + 40$$
$$-4w \quad -4w$$

$$12w - 56 = 40$$

$$\frac{12w}{12} = \frac{96}{12}$$

$$\textcircled{w=8}$$

$$\frac{8}{9} = \frac{w-2}{6}$$

$$48 = 9(w-2)$$

$$\begin{array}{r} 48 = 9w - 18 \\ +18 \quad \quad +18 \end{array}$$

$$\frac{66}{9} = \frac{9w}{9}$$

$$w = 7.3$$

$$\frac{m+12}{9m} = \frac{5}{9}$$

$$9(m+12) = 9m(5)$$

$$\begin{array}{r} 9m + 108 = 45m \\ -9m \quad \quad -9m \end{array}$$

$$\frac{108}{36} = \frac{36m}{36}$$

$$m = 3$$

3 is 75% of what number?

$$\frac{3}{x} = \frac{75}{100}$$

$$\frac{75x}{75} = \frac{300}{75}$$

$$x = 4$$

98 is what percent of 1000?

$$9.8 = X$$

