Finding percentages

Find 30% of 140.

$$\frac{14\cancel{0}}{10\cancel{0}} \times 3\cancel{0} = 42$$

(Divide by 100 to find 1% and then multiply by 30 to find 30%.)

Find 12% of 75.

$$\frac{75^3}{100_{\cancel{4}_1}} \times \cancel{12}^3 = 9$$

(Divide by 100 to find 1% and then multiply by 12 to find 12%.)

Find 30% of these numbers.

620   240

80   160

Find 60% of these numbers.

60   100

160   580

Find 45% of these numbers.

80 oz   40 in.

240 fl oz   600 mi

Find 12% of these numbers.

$150 $600

125 ft   775 ft

Finding percentages

Find 30% of 140. $\dfrac{14\cancel{0}}{10\cancel{0}} \times 3\cancel{0} = 42$ (Divide by 100 to find 1% and then multiply by 30 to find 30%.)

Find 12% of 75. $\dfrac{\cancel{75}^{3}}{\cancel{100}_{\cancel{4}_1}} \times \cancel{12}^{3} = 9$ (Divide by 100 to find 1% and then multiply by 12 to find 12%.)

Find 30% of these numbers.

620   $\dfrac{620}{100} \times 30 = 186$ 240 $\dfrac{240}{100} \times 30 = 72$

80   $\dfrac{80}{100} \times 30 = 24$ 160 $\dfrac{160}{100} \times 30 = 48$

Find 60% of these numbers.

60   $\dfrac{60}{100} \times 60 = 36$ 100 $\dfrac{100}{100} \times 60 = 60$

160   $\dfrac{160}{100} \times 60 = 96$ 580 $\dfrac{580}{100} \times 60 = 348$

Find 45% of these numbers.

80 oz $\dfrac{80}{100} \times 45 = 36 \text{ oz}$ 40 in. $\dfrac{40}{100} \times 45 = 18 \text{ in.}$

240 fl oz $\dfrac{240}{100} \times 45 = 108 \text{ fl oz}$ 600 mi $\dfrac{600}{100} \times 45 = 270 \text{ mi}$
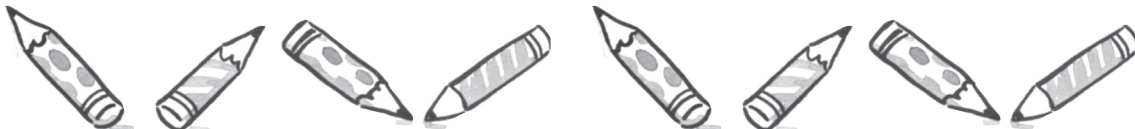

Find 12% of these numbers.

$150 $\dfrac{150}{100} \times 12 = \$18$ $600 $\dfrac{600}{100} \times 12 = \$72$

125 ft $\dfrac{125}{100} \times 12 = 15 \text{ ft}$ 775 ft $\dfrac{775}{100} \times 12 = 93 \text{ ft}$

The most common error when finding percentages is to reverse the operation, i.e. to divide by the percentage required and multiply by 100. Explain again that if the whole is 100% we divide the number by 100 to find 1% and then multiply by the percentage we want.