

Los porcentajes se usan constantemente en el mundo real.

Problemas (Individual)

8.8) $7\% (800) = 7 \cdot 8 = 56$

8.9) $\frac{6}{15} = \frac{2}{5} = 40\%$

8.10) $\frac{3}{5} = 60\%$

8.11) $220 - 26 = 194$ $80\% 194 = \frac{4}{5} \cdot 194 = \frac{776}{5} = 155 \frac{1}{5} \approx 155 \text{ bpm}$

8.12) $15\% x = 3$
 $\frac{15}{100} x = 3$ $x = \frac{1 \cdot 100}{15} = 20$

8.13) $30\% 200 = 60$ queda con 140. $40\% 140 = \frac{2}{5} \left(\frac{140}{1} \right) = 56$
 42 $140 - 56 = 84$

8.14) 60 ml
 $80\% (60) = 48 \text{ ml de aceite y } 12 \text{ ml de vinagre.}$

$\frac{1}{4}$
 $\frac{16}{64} = \frac{1}{4}$ $48 \text{ ml} + 16 \text{ ml} = 64 \text{ ml}$
 25%

Ejercicios

8.2.1) Total = 25
shaded = $9 + 4 = 13$ $\frac{13}{25} = \frac{52}{100} = 52\%$

8.2.2) $\frac{7}{10}$

$$\frac{28}{46} = \frac{7}{10} = 70\%$$

8.2.3) $\frac{15}{50} = 30\%$

8.2.4)

(a) $270,000 \times \frac{6}{100} = 16200$

(b) $6\% \cdot x = 15.000$

$$x = \frac{15000 \cdot 100}{6}$$

$$\frac{6}{100} (x) = 15000$$

$$x = 250.000$$

8.2.5)

$$7 + 12 + 21 = 40 \text{ correctas}$$

$$60\% \cdot 75 = 45$$

Necesitaba 5 respuestas adicionales correctas.

8.2.6)

$$\text{yellow} = 30\% (30) = 9$$

$$\frac{14}{35} = \frac{x}{100}$$

$$\frac{\frac{20}{100} \cdot 14}{35} = 40\%$$

8.2.7)

$$20\% \cdot x = 3$$

$$12$$

8.2.8)

$$45\% \cdot x = 7$$

$$\frac{45}{100} (x) = 7$$

$$x = \frac{7 \cdot 100}{45} = 20$$

$$20 - 7 = 13$$

8.2.9)

$$\frac{30}{50}$$

$$\frac{30+a}{50+40} = \frac{70}{100}$$

$$30+a = \frac{7 \cdot 90}{10}$$

$$30+a = 63$$

$$a = 33$$

8.2.10)

$$W = 100$$

$$30\% (100) + 45\% (200)$$

$$30 + 90$$

$$4$$

$$E = 200$$

$$300$$

$$= \frac{1}{300} = \frac{1}{10}$$

$$40\%$$

$$= \frac{2}{5}$$

8.2.11)

$$\frac{75}{100} (500) = 375 \text{ aprobaron.}$$

abrían 75 aprobados más.

$$\frac{40}{100} (500) = 450 \text{ aprobarían.}$$

