

Alg. 10/6

WB 3.1

$$\frac{2.8(10)}{1.4(10)} = \frac{28}{14} = 2$$

# 17

$$-1.4a = 2.8$$

or

$$1.4 \sqrt{2.8}$$

$$14 \sqrt{\begin{array}{r} 2 \\ 28 \\ \hline 28 \end{array}}$$

$$\begin{array}{r} -1.4a = 2.8 \\ \hline -1.4 \quad -1.4 \end{array}$$

$$a = -$$

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#23 Distance = Rate  $\cdot$  Time

$$\frac{500 \text{ meters}}{74.75} = \frac{R}{74.75} \cdot 74.75 \text{ secs.}$$

$$\text{rate} = \frac{500 \text{ meters}}{74.75 \text{ seconds}}$$

243

$$74.75 \overline{) 500.0000}$$

6.68

$$\begin{array}{r} 448 \\ \hline 51500 \\ 44850 \\ \hline 66500 \\ 58800 \\ \hline \end{array}$$

$$500 = 74.75 \underline{r}$$

$$r = 6.6 \text{ m per sec.}$$

$$\frac{6.7 \text{ meters}}{1 \text{ sec.}}$$

WB 3.3

#16

$$23 \text{ yr} = \underline{2x} + \underline{x} + \underline{x+3}$$

$$\begin{array}{r} 23 = 4x + 3 \\ + -3 \qquad \qquad + -3 \\ \hline \end{array}$$

$$20 = 4x$$

$$\frac{20}{4} = \frac{\cancel{4x}}{\cancel{4}}$$

$$5 = 1x$$

$$A = 1000 \text{ ft}^2$$

WB 3.3 # 21

M:  $\rightarrow 4 \text{ ft}^2 \text{ per } 1 \text{ min.}$   $x \text{ min}$

F:  $\rightarrow 3 \text{ ft}^2 \text{ per } 1 \text{ min.}$   $(x-45) \text{ min}$

$$\underline{4x} + \underline{3(x-45)} = 1000$$

45  
3  
135

$$\underline{4x} + \underline{3x} + 3(-45) = 1000$$

$$7x + -135 = 1000$$

+135                    +135

$$\begin{array}{r} 162 \\ 2 \overline{) 1135} \\ \underline{7} \\ 43 \\ \underline{42} \\ 15 \end{array}$$

$$7x = 1135 \quad \underline{162.142}$$

$$\frac{7x}{7} = \frac{1135}{7}$$

$$x = 162 \frac{1}{7}$$

14 < 1

162  $\frac{1}{7}$  min  
45

end  
WB 33 # 21

117 17

WB

33

$D = r t$

1500 miles =  $\frac{50 \text{ miles}}{1 \text{ hr.}} \cdot t$

1500 =

3.2 text # 24-28

~~indep~~ ~~dep~~  
(input, output)  
x y

$7 + 3(x) = y$

$$\underline{7 - 8x} = 4x - 17$$

$$a - b =$$

$$a + \underline{-b}$$

$$7 + -8x = 4x + \underline{-17}$$

$$+ -7$$

$$+ -7$$

$$0 + -8x = 4x + -24$$

$$+ -4x$$

$$+ -4x$$

$$-12x = -24$$

$$\frac{-12x}{-12} = \frac{-24}{-12}$$

$$x = 2$$

$$7 + -8x = 4x + -17$$

$$+17$$

$$+17$$

$$24 + -8x = 4x$$

$$+8x$$

$$+8x$$

$$\frac{24}{12}$$

$$= \frac{12x}{12}$$

$$2 = x$$

$$9x - 5 = \frac{1}{4} (16x + 60)$$

$$\boxed{9x + -5} = \boxed{\frac{1}{4} (16x + 60)}$$
$$9x + -5 = \frac{1}{4} \left( \frac{16x}{1} \right) + \frac{1}{4} (60)$$

$$\begin{array}{r} 9x + -5 \\ + +5 \end{array} = \begin{array}{r} 4x + 15 \\ + +5 \end{array}$$

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$$\begin{array}{r} 9x \\ + -4x \end{array} = \begin{array}{r} 4x \\ + -4x \end{array} + 20$$

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$$\frac{5x}{5} = \frac{20}{5}$$

$$x = 4$$

$$8y - 6 = \frac{2}{3} (6y + 15)$$

$$8y + -6 = \frac{\cancel{2}}{\cancel{3}} (\cancel{6}y + \frac{2}{1}5) + \frac{\cancel{2}}{\cancel{3}} (\frac{\cancel{15}}{\cancel{1}})$$

$$8y + -6 = 4y + 10$$