

T-A1 Algebra 1 Week 21

① $\frac{b}{3} = \frac{5}{10}$

$(3)(5) = 10b$

$\frac{15}{10} = \frac{10b}{10}$

$b = \frac{15 \div 5}{10 \div 5} = \frac{3}{2}$

② $\frac{10}{7} = \frac{n}{2}$

$7n = (10)(2)$

$\frac{7n}{7} = \frac{20}{7}$

$n = \frac{20}{7}$

③ $\frac{x-3}{7} = \frac{10}{4}$

$4(x-3) = (10)(7)$

$4x - 12 = 70$

$+12 \quad +12$

$\frac{4x}{4} = \frac{82}{4}$

$x = \frac{82 \div 2}{4 \div 2} = \frac{41}{2}$

④ $\frac{k+9}{7} = \frac{k+10}{3}$

$3(k+9) = 7(k+10)$

$3k + 27 = 7k + 70$

$-3k \quad -3k$

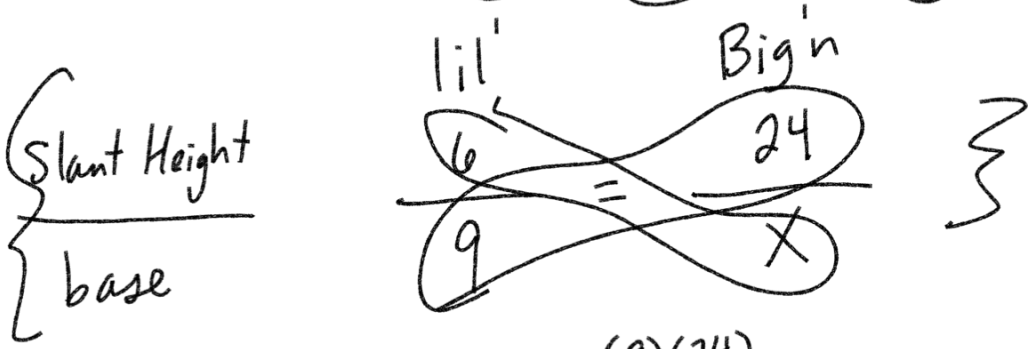
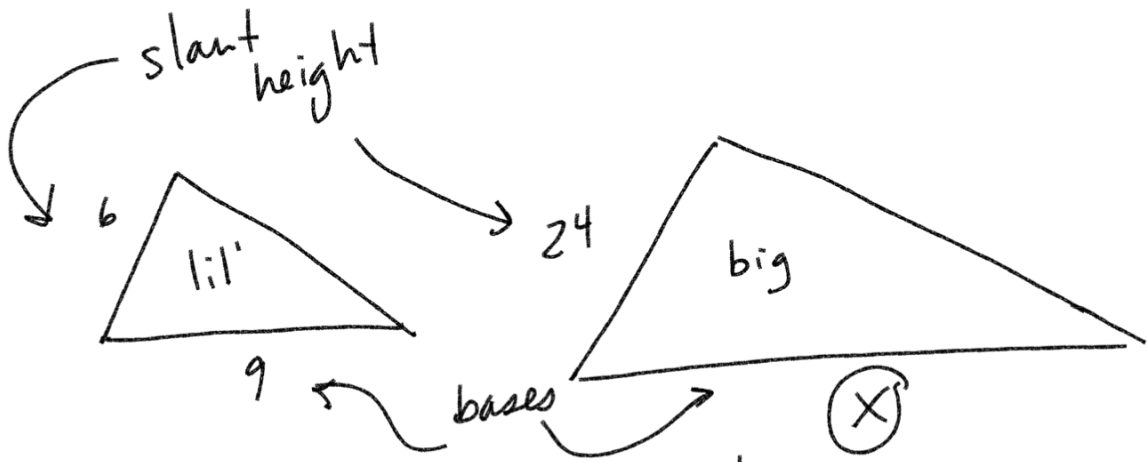
$27 = 4k + 70$

$-70 \quad -70$

$\frac{-43}{4} = \frac{4k}{4}$

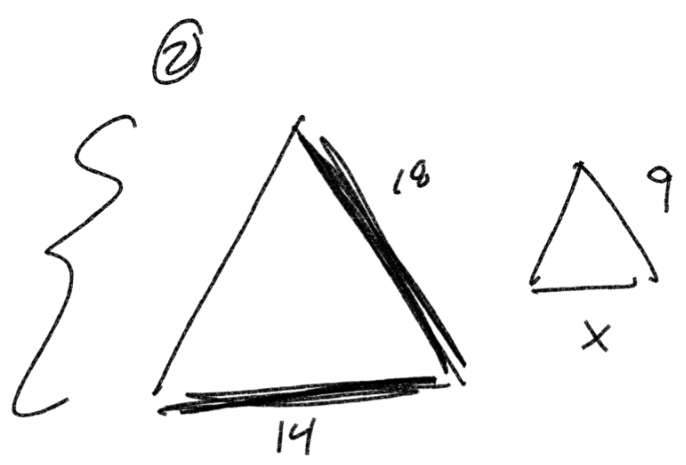
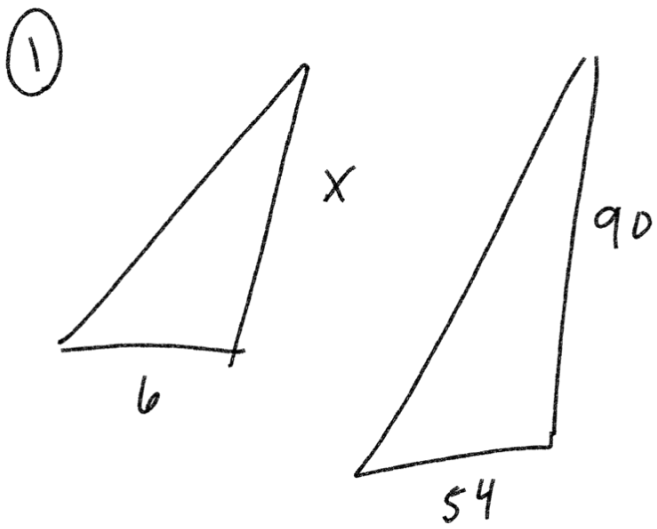
$k = \frac{-43}{4}$

I hate Math



$$6x = (9)(24)$$

$$\frac{6x}{6} = \frac{216}{6} \quad \boxed{x = 36}$$



$$\frac{X}{6} = \frac{90}{54}$$

$$\frac{18}{14} = \frac{9}{x}$$

4-3 Proportions and Percent Equations

What is 10% of 50?

↓ ↓ ↓ ↓ ↓

x = 0.10 * 50

10% → decimal
 10% → 0.10

$$x = 5$$

8 is 40% of what?

↓ ↓ ↓ ↓ ↓

8 = 0.40 * x

40% → 0.40
 40% → 0.40

$$\frac{8}{0.4} = \frac{0.4x}{0.4}$$

$$x = 20$$

$$\frac{80}{4} = \frac{80}{4} = 20$$

$$\frac{4x = 8}{4} = \frac{8}{4}$$

$$\frac{0.4x = 8}{0.4} = \frac{8}{0.4}$$

7 is what percent of 35?

↓ ↓ ↓ ↓

7 = x% * 35

percent
 ↓
 for every 100

$$\frac{7}{35} = \frac{35x}{35}$$

$$0.2 * 100 = 20$$

$$x = \frac{7}{35} = 0.2$$

$$x = 20\%$$

25% of what is 28
 ↓ ↓ ↓ ↓
 0.25 * X = 28

$$\frac{0.25x = 28}{0.25} = \boxed{112}$$

What percent of 72 is 18?
 ↓ ↓ ↓ ↓
 X % * 72 = 18

$$72x = 18 \quad 18 \div 72 =$$

$$\frac{18}{72} = 0.25 \quad \boxed{25\%}$$

What is 20% of 650
 ↓ ↓ ↓ ↓
 X = 0.20 * 650

$$\boxed{X = 130}$$

2021
 new \$60

1985
 old \$35

Percent increase

$$\frac{\text{new} - \text{old}}{\text{old}} * 100\%$$

$$\frac{60 - 35}{35} * 100\%$$

$$\frac{25}{35} * 100\%$$

$$0.714285 * 100\%$$

$$\boxed{71.4\%}$$

1985	2021
\$3.55	\$12.

$$\frac{\text{new} - \text{old}}{\text{old}} * 100\%$$

$$\frac{12 - 3.55}{3.55} = \frac{8.45}{3.55} = 2.38 * 100\%$$

238%

old	1985	2021
	\$950	\$180
		new old

$$\frac{180 - 950}{950} = \frac{-770}{950} = -0.81 * 100\%$$

81%
decrease

HW
 ch 4.3 events
 ch 4.4 events
 Supplemental WS
 Online HW 21 } March 9th
 Quiz 21
 HW/Quiz 20 March 2nd
 Test due Today-ish...

