

8.3.4

HWK

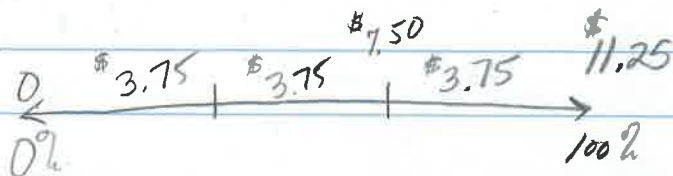
8-98)

a) 45°

b) 135°

c) 30°

8-99) \$7.50



8-100)

Karla 35% fewer miles per gallon than Jennie's solar car.

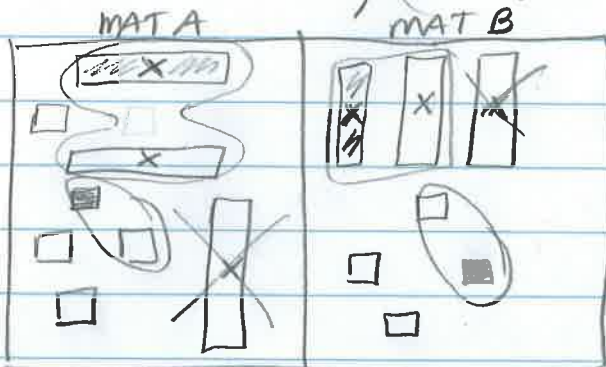
If Jennie gets 60 mpg, how many mpg does Karla's car get.

$$(0.35)(60) = 21 \quad 60 - 21 = 39 \text{ mpg}$$

OR

$$100\% - 35\% = 65\%, \quad (0.65)(60) = 39 \text{ mpg}$$

8-101)



$$-3 < -2$$

$$8-102) \quad a) \quad \frac{7}{12} \cdot \boxed{\frac{8}{8}} = \frac{56}{m}$$

$$m = 96$$

$$b) \quad \frac{8}{3} \cdot \boxed{\frac{16}{16}} = \frac{n}{48}$$

$$n = 128$$

$$c) \quad \frac{20}{26} \cdot \boxed{\frac{1.5}{1.5}} = \frac{k}{39}$$

$$k = 30$$

$$d) \quad \frac{20}{42} \cdot \boxed{\frac{2.5}{2.5}} = \frac{50}{h}$$

$$h = 105$$

8-103)

3 blue sedans

2 tan trucks

2 black trucks

4 red convertibles

4 blue minivans

2 black SUVs

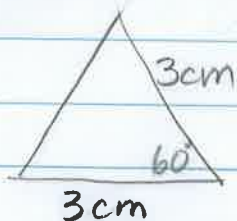
3 tan hybrids

$$P(\text{black}) = \frac{4}{20} = \frac{1}{5} \text{ or } 20\%$$

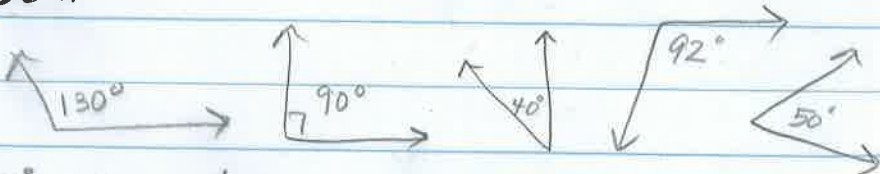
8-104)

No, she can make several different quadrilaterals with sides of 2, 3, 4, 5 cm.

8-105)



8-106)



a) 40° and 50° are acute.

130° and 92° are obtuse; 90° is right

- b) 40° and 50° are complementary
a) 130° and 50° are supplementary

8-107)

$$a) \frac{2(5+3)}{4} = \frac{2(8)}{4} = \frac{16}{4} = 4$$

$$b) \frac{1}{2}(15+3) - 10 \div 2$$
$$\frac{1}{2}(18) - 10 \div 2$$
$$\frac{18}{2} - 10 \div 2$$
$$9 - 5$$
$$4$$

$$c) 5\frac{1}{2} - 2\frac{1}{4} + \frac{3}{8}$$
$$5\frac{4}{8} - 2\frac{2}{8} + \frac{3}{8}$$
$$3\frac{2}{8} + \frac{3}{8}$$
$$3\frac{5}{8}$$

$$d) 3 + \frac{3}{5} \cdot \frac{1}{4}$$
$$3 + \frac{3}{20}$$
$$3\frac{3}{20}$$

$$e) -2 + (-5+6)^2$$
$$-2 + (1)^2$$
$$-2 + 1$$
$$-1$$

$$f) \frac{3}{4} \cdot \frac{1}{4} + \frac{5}{8} \cdot \left(-\frac{3}{2}\right)$$
$$\frac{3}{16} + \left(-\frac{15}{16}\right)$$
$$-\frac{12}{16} = -\frac{3}{4}$$

