

homework 7-140 to 7-146

7-140

a) $(5, 2)(11, 14)$

$$\left(\frac{5+11}{2}, \frac{2+14}{2} \right)$$

$$(8, 8)$$

b) $(3, 8)(10, 4)$

$$\left(\frac{3+10}{2}, \frac{8+4}{2} \right)$$

$$(6.5, 6)$$

7-141

a) $y = \frac{1}{3}x + 15$

x $(0, 15)$

y $(3, 16)$

b) $y - 16 = -4x + 12$

$$y = -4x + 28$$

z $(7, 0)$

y $(3, 16)$

$$\begin{array}{r} 28 \\ -12 \\ \hline 16 \end{array}$$

7-142

a) Must be: none

Could be: square
rectangle
right trapezoid

b) Must be: none

could be: Kite
rhombus
square

7-143

a) If a polygon is a parallelogram
then the area of the polygon
equals base times height

b) If the area of the polygon
equals base times height
then a polygon is a parallelogram
Always true - remember a rectangle
and square are parallelograms

c) If a polygon is a triangle
then the area is $\frac{1}{2}$ the base
times the height.

d) If the area is $\frac{1}{2}$ the base times
the height
then a polygon is a triangle
Always true

7-144

a) $\frac{360}{18} = 20$ sided figure

b) 90° - yes a square
 180° - no

13° - no because it doesn't create a regular polygon

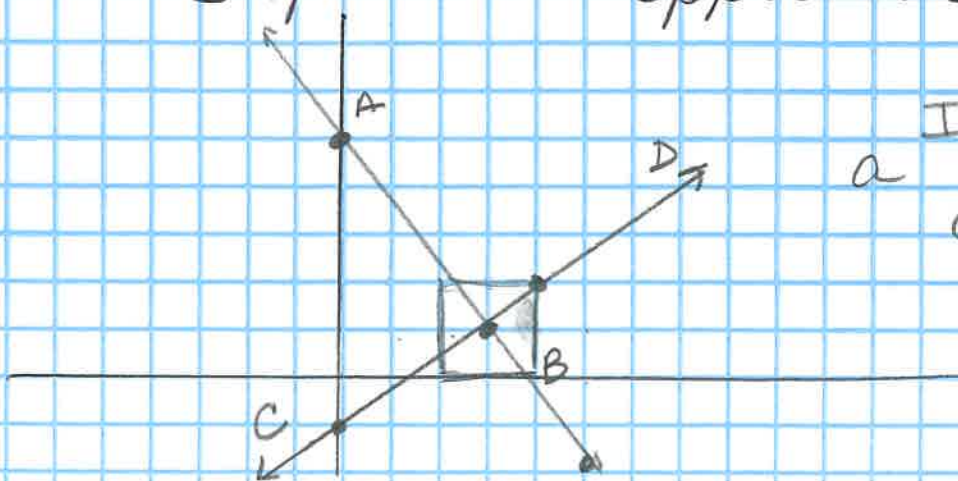
7-145

$$\frac{1}{4}(3) + \frac{3}{4}(1) = \frac{3}{4} + \frac{3}{4} = \frac{6}{4} = 1\frac{1}{2}$$

\$1.50 per spin

7-146

a) diagonals are perpendicular
slopes are opposite reciprocals



It could be a kite, rhombus or square

1/11/19

Example 1: $\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$

Example 2: $\frac{2}{3} \times \frac{5}{6} = \frac{10}{18} = \frac{5}{9}$

Example 3: $\frac{3}{4} \times \frac{2}{5} = \frac{6}{20} = \frac{3}{10}$

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Example 4: $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

1/11/19

Example 5: $\frac{4}{5} \times \frac{3}{7} = \frac{12}{35}$