**Homework #6**

**Due Thursday 11/9**

Write 3 equivalent fractions for each fractions below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Original Fraction** | **Equivalent #1** | **Equivalent #2** | **Equivalent #3** |
| $$\frac{2}{7}$$ |  |  |  |
| $$\frac{3}{11}$$ |  |  |  |
| $$\frac{7}{9}$$ |  |  |  |
| $$\frac{1}{17}$$ |  |  |  |
| $$\frac{3}{10}$$ |  |  |  |

Decide if the following are similar, congruent, or neither.

|  |  |  |
| --- | --- | --- |
| a.  | b. | c.  |
| d.  | e.  | f.  |

Fill in the missing corresponding sides and angles for the figures below.

|  |  |
| --- | --- |
| 1. Image result for congruent polygons
 | $AB≅\\_\\_\\_\\_\\_\\_$ $∠BAC≅\\_\\_\\_\\_\\_\\_$ $\\_\\_\\_\\_\\_≅EF$ $\\_\\_\\_\\_\\_≅∠DFE$ $AC≅\\_\\_\\_\\_\\_\\_$ $∠CBA≅\\_\\_\\_\\_\\_$ |
| 1. Image result for congruent trapezoid
 | $AD≅\\_\\_\\_\\_\\_\\_$ $∠ADC≅\\_\\_\\_\\_\\_$$DC≅\\_\\_\\_\\_\\_\\_$ $ ∠DCB≅\\_\\_\\_\\_\\_$$CB≅\\_\\_\\_\\_\\_\\_$ $∠CBA≅\\_\\_\\_\\_\\_$$BA≅\\_\\_\\_\\_\\_\\_$ $∠BAD≅\\_\\_\\_\\_\\_$ |

Determine if the following sets of figures are similar or not. **Justify** your reasoning.

|  |  |  |
| --- | --- | --- |
|  |  |  |

The figures below are similar. Identify the corresponding sides using your knowledge of similar figures.

|  |  |
| --- | --- |
| wo similar figures | Side AB corresponds to \_\_\_\_\_\_\_\_Side BD corresponds to \_\_\_\_\_\_\_\_Side CD corresponds to \_\_\_\_\_\_\_\_Side AC corresponds to \_\_\_\_\_\_\_\_ |

The figures below are similar. Identify the corresponding sides using your knowledge of similar figures.

 Side AB corresponds to \_\_\_\_\_\_\_\_

Side BC corresponds to \_\_\_\_\_\_\_\_

Side AC corresponds to \_\_\_\_\_\_\_\_

Determine the length of the missing side using your understanding of similar figures.



Solve for Side Z in the figure below using your knowledge of similar figures.

Side Z=\_\_\_\_\_\_\_\_\_\_\_

Label the corresponding sides between the two similar figures below. Remember to use the appropriate number of hash marks to represent corresponding sides.