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| 1. Complete the sentences (a-d) using either **“congruent”** or **“supplementary”**

When parallel lines are cut by a transversal then, | 2. Use the diagram to answer questions a – d. http://img.sparknotes.com/figures/C/cdafbce3d7fbcda5507c818a9e198ec0/transversal.gif |
| 1. Corresponding angles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
 |
| 1. Alternate Interior Angles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
 | a. *m*2 = 70°. Find the *m*6. |
| 1. Same Side Interior Angles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
 | 1. *m*3 = 5*x* and *m* 6 = 3*x* + 8. Find the value of *x* and the measure of 4 and 5.
 |
| 1. Alternate Exterior Angles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
 | 1. *m* 4 = 20*x* + 20 and *m*6 = 10*x* + 10. Find the value of *x*.
 |
| **Find each missing angle measure** |
| 3. In triangle ABC the measure of angle A is 40° and the measure of angle B is 90°. **Find the measure of angle *F*.**  | 4. CAxx + 20 B5x + 20x = \_\_\_\_\_\_m∠A = ­\_\_\_\_\_\_\_\_\_\_ m∠B = ­\_\_\_\_\_\_\_\_\_\_ m∠C = ­\_\_\_\_\_\_\_\_\_\_ |
| 5.  x°65°50°x= \_\_\_\_\_\_\_\_\_\_  | 6. 45° 109°y°x°x = \_\_\_\_\_\_\_\_\_\_ y = \_\_\_\_\_\_\_\_\_\_ |
| 7. The measure of one angle of a triangle is twice the measure of a second angle. The measure of the third angle is 12 less than the sum of the other two. Find the measure of the angles of the triangle. |
| 8. ∆ABC is similar to ∆DEF. Identify all corresponding angles and sides.EADBCF |
| ∠A corresponds to \_\_\_\_\_\_\_\_\_\_.∠B corresponds to \_\_\_\_\_\_\_\_\_\_.∠C corresponds to \_\_\_\_\_\_\_\_\_\_. | AB corresponds to \_\_\_\_\_\_\_\_\_\_.BC corresponds to \_\_\_\_\_\_\_\_\_\_.AC corresponds to \_\_\_\_\_\_\_\_\_\_. |

**Are the following figures similar?**

|  |  |
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| 9.  **Explain by labeling AA, SAS, or SSS.**7799 | 10.**Q****8** **4****5****D****S****R****10****B****A****P****C** |

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| The following figures are similar. Solve for the designated side.**5****8****2****y**11.    | Each figure shows a pair of similar triangles. Find each unknown length. 12.  30 30 x y20  45  |
| 13. Using the diagram below, name all the following pairs of angles.http://img.sparknotes.com/figures/C/cdafbce3d7fbcda5507c818a9e198ec0/transversal.gif | Vertical angles? (4) |
| Corresponding angles? (4) |
| Which pairs of angles are linear pairs? (8) |
| Alternate interior angles? (2) |
| Alternate exterior angles? (2) |