1. Which pairs of angles are equal in this diagram?

|  |  |
| --- | --- |
| a. | *a* = *b*, *c* = *d*, and *e* = *f* |
| b. | *a* = *e*, *c* = *g*, and *b* = *f* |
| c. | *a* = *c,* *e* = *g*, and *f* = *h* |
| d. | *a* = *e*, *b* = *d*, and *c* = *g* |



 2. Which are the correct measures for *YXZ* and *XZY*?

|  |  |
| --- | --- |
| a. | *YXZ* = 63°, *XZY* = 91° |
| b. | *YXZ* = 53°, *XZY* = 91° |
| c. | *YXZ* = 63°, *XZY* = 81° |
| d. | *YXZ* = 53°, *XZY* = 81° |



 3. Determine the sum of the measures of the interior angles of this polygon.

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|  |  |
| --- | --- |
| a. | 1080° |
| b. | 1440° |
| c. | 720° |
| d. | 540° |

 4. Which are the correct measures of the interior angles of *CDE*?

|  |  |
| --- | --- |
| a. | *DCE* = 46°, *CDE* = 101°, and *CED* = 33° |
| b. | *DCE* = 32°, *CDE* = 83°, and *CED* = 65° |
| c. | *DCE* = 76°, *CDE* = 91°, and *CED* = 13° |
| d. | *DCE* = 56°, *CDE* = 101°, and *CED* = 23° |



 10. Determine the measure of each angle, give reason.



FBE = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

FBD = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

BDE = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. Using the given triangle, determine all of the interior and exterior angles

 12. Determine the unknown angles.



EAD = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

 ABC = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 ADE \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 BCD = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 CDA = \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. Determine the value of *x*.

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14. Given: UY = UZ.

 8 = 5

 Prove: WX || YZ