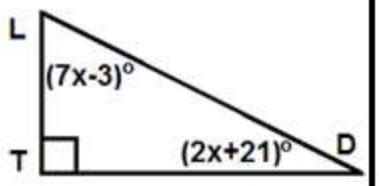
Geometry January 16, 2014 Parallels and Angles

1



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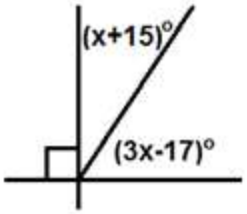

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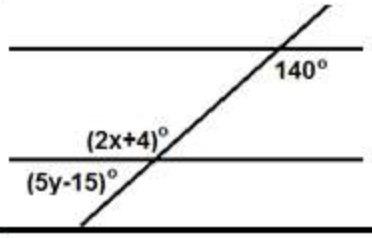

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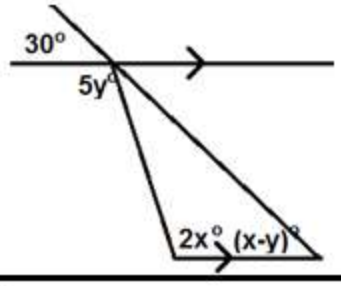

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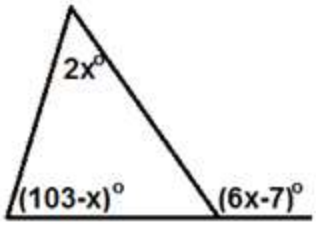

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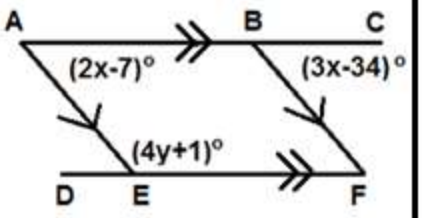

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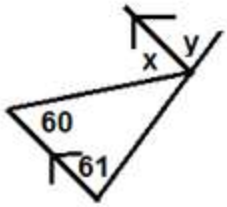

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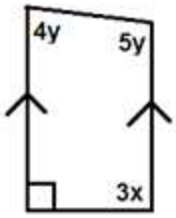

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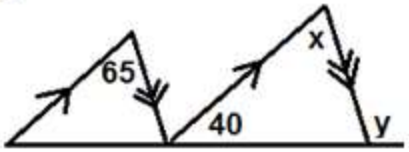


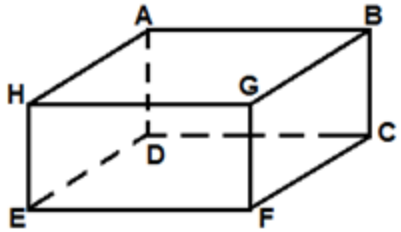
Given the variable expressions for angle measures of a triangle, find the measure of each angle. Classify as acute, obtuse or right. Classify as scalene, isosceles or equilateral.

$\angle A = (3x+12)^\circ$ $\angle P = (6x+11)^\circ$ $\angle D = (2x+5)^\circ$

10. $\angle H = (4x-2)^\circ$ 11. $\angle O = (3x+2)^\circ$ 12. $\angle K = 3(x-5)^\circ$

$\angle S = (3x+30)^\circ$ $\angle C = (5x-1)^\circ$ $\angle Z = (4x+10)^\circ$

13. Given the 3-D rectangular prism, name the following



i) all segments parallel to $\overline{DC}$

ii) all segments perpendicular to $\overline{AH}$

iii) a plane parallel to plane GFE.

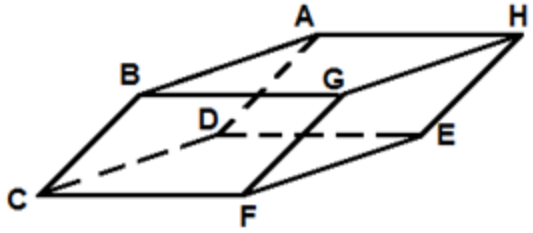
iv) all planes perpendicular to plane BCF

NOTES:

Lines are **parallel** if they are coplanar and they do not intersect.

Lines are **skew** if they are not coplanar and they do not intersect.

14. Given the 3-D parallelogram prism, name the following



i) a plane parallel to plane DCF

ii) $\angle BCF = 70^\circ, \angle AHE = ?, \angle HED = ?$

iii) $\angle HGF = (8x+31)^\circ, \angle DCB = (7x-16)^\circ$
find $\angle HED = ?$

15. You know that ASA is a triangle congruence pattern. Use ASA to reason that AAS is also a triangle congruence pattern.