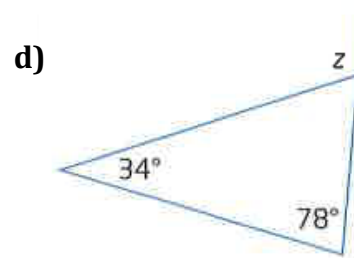
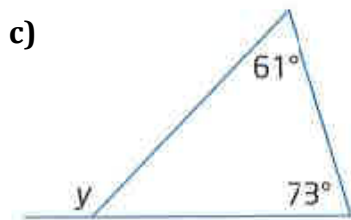
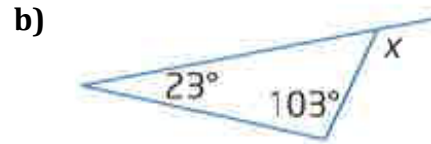
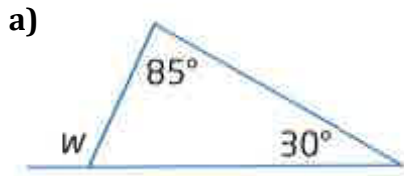


7.1 Angle Relationships in Triangles - Worksheet

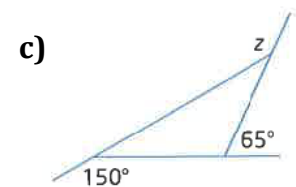
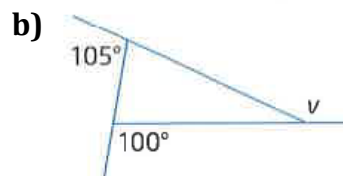
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1. Find the measure of each exterior angle.



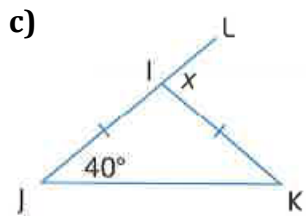
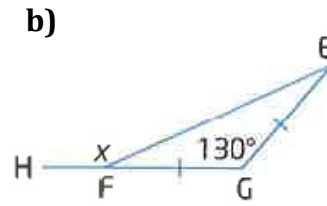
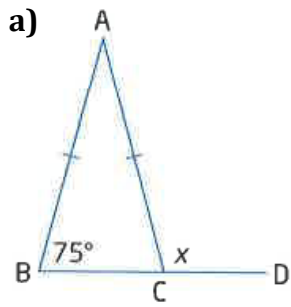
2. Find the measure of each unknown exterior angle.



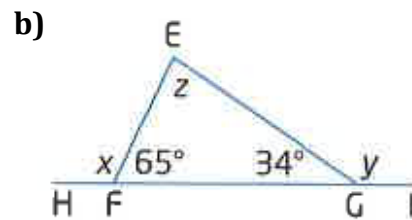
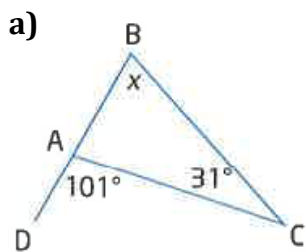
3. If the measures of two of the exterior angles of a triangle are 70° and 120° , the measure of the third exterior angle is...

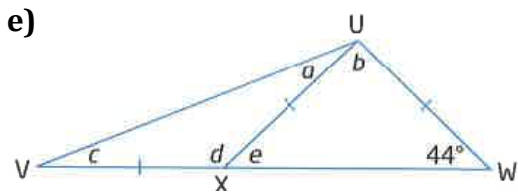
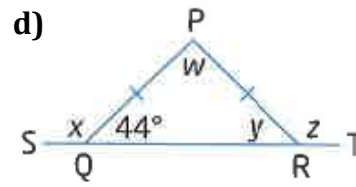
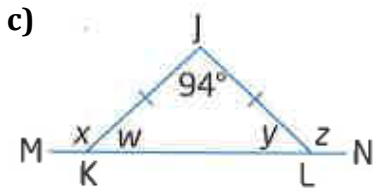
- A) 10° B) 70° C) 170° D) 190°

4. Find the measure of each exterior angle labeled x for each isosceles triangle.

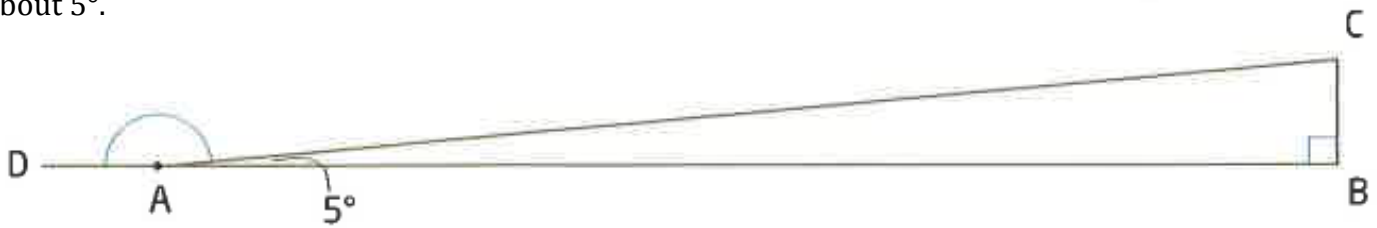


5. Find the measure of each unknown angle.





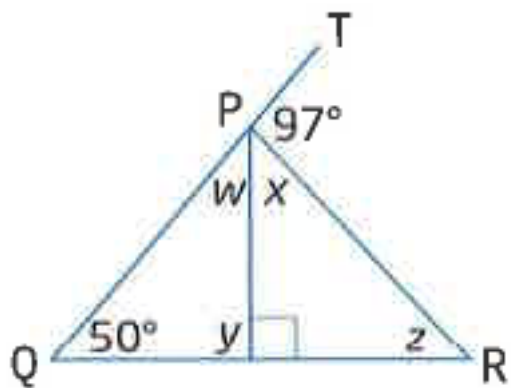
6. A contractor is building a wheelchair ramp. To be safe for all users, the ramp should rise at an angle of about 5° .



a) To check the slope of the ramp, the contractor measures $\angle DAC$ at the foot of the ramp. What measure should this angle have?

b) Find the measure of the interior and exterior angle at the top of the ramp.

7. Find the measure of each unknown angle.



Answers

1. a) 115° b) 126° c) 134° d) 112°

2. a) 40° b) 155° c) 145°

3. C

4. a) 105° b) 155° c) 80°

5. a) 70° b) $x = 115^\circ, y = 146^\circ, z = 81^\circ$ c) $w = 43^\circ, x = 137^\circ, y = 43^\circ, z = 137^\circ$

d) $w = 92^\circ, x = 136^\circ, y = 44^\circ, z = 136^\circ$ e) $a = 22^\circ, b = 92^\circ, c = 22^\circ, d = 136^\circ, e = 44^\circ$

6. a) 175° b) interior = 85° ; exterior = 95°

7. $w = 40^\circ, x = 43^\circ, y = 90^\circ, z = 47^\circ$