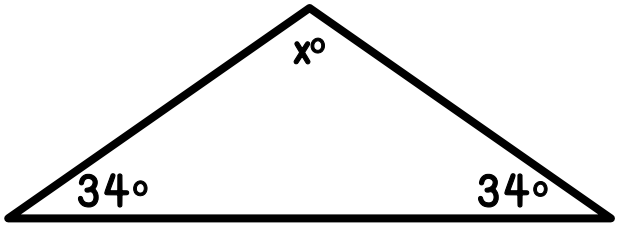
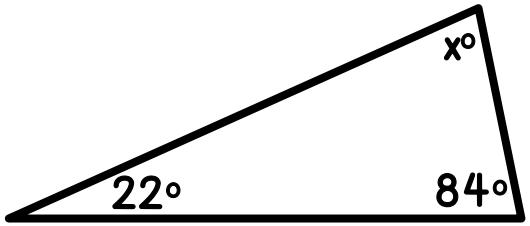
Write and solve an equation to find the missing angle.



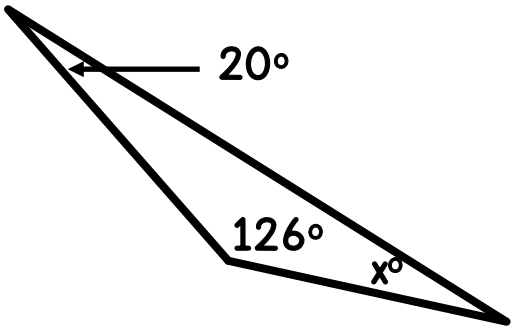
1

Write and solve an equation to find the missing angle.



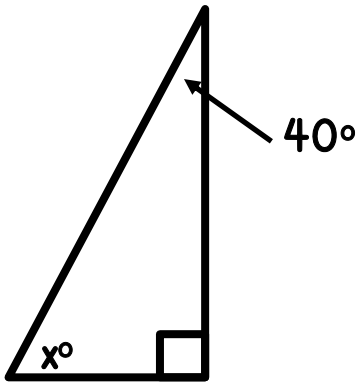
2

Write and solve an equation to find the missing angle.



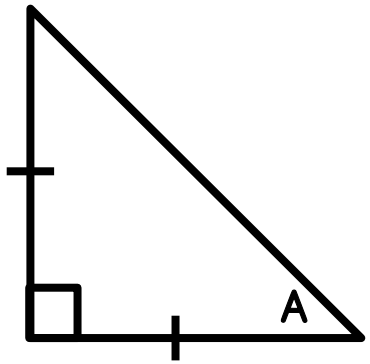
3

Write and solve an equation to find the missing angle.



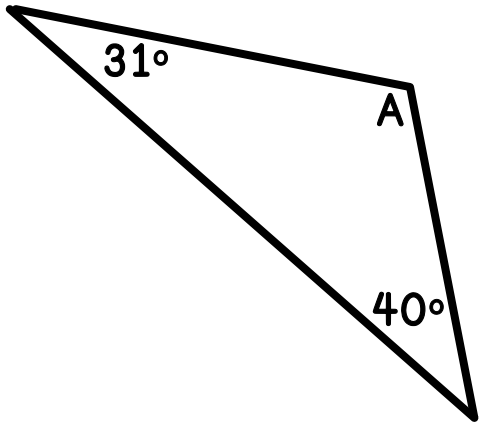
4

Determine if the measure of ∠A is 45°. Prove it!



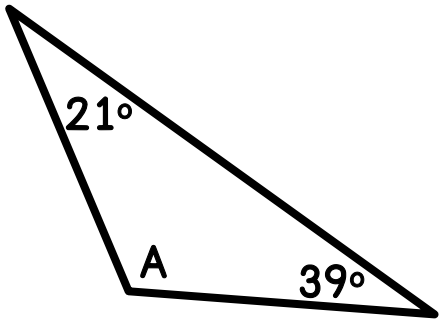
5

Determine if the measure of ∠A is 99°. Prove it!



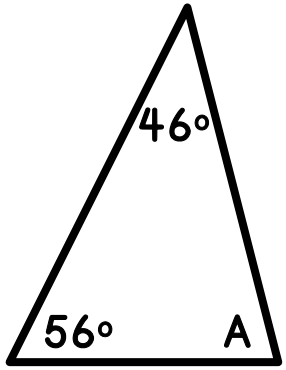
6

Determine if the measure of ∠A is 110°. Prove it!



7

Determine if the measure of ∠A is 78°. Prove it!



8

Read the statement below, draw a picture, and solve for the missing angle.

In triangle QRS, the measure of angle Q is 70°. Angle R is congruent to angle S. What is the measure of angle R in degrees?

9

Read the statement below, draw a picture, and solve for the missing angle.

In triangle LMN, the measure of angle L is 32°. Angle M is a right angle. What is the measure of angle N in degrees?

10

Read the statement below, draw a picture, and solve for the missing angle.

In triangle DEF, the measure of angle D is 122°. Angle E is acute and angle F is 19°. What is the measure of angle E in degrees?

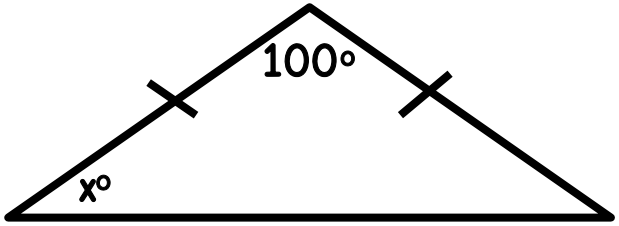
11

Read the statement below, draw a picture, and solve for the missing angle.

In triangle XYZ, the measure of angle X is 40° and is congruent to angle Y. What is the measure of angle Z in degrees?

12

Which equation can be used to find the value of x?



A. $100 + x = 180$

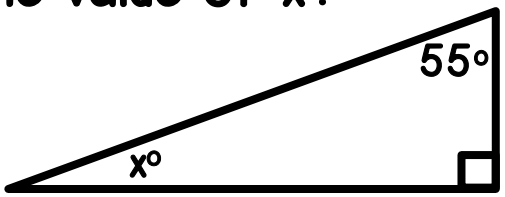
C. $100 + 2x = 180$

B. $2(100 + x) = 180$

D. $180 - x = 100$

13

Which equation can be used to find the value of x?



A. $x + 55 = 180$

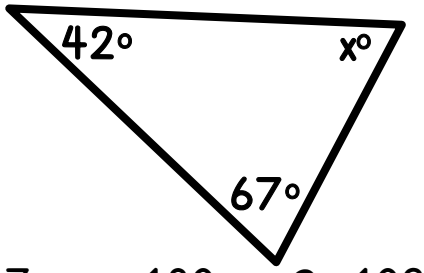
C. $x - 55 = 90$

B. $2x + 55 = 180$

D. $180 = x + 55 + 90$

14

Which equation can be used to find the value of x?



A. $42 + 67 - x = 180$

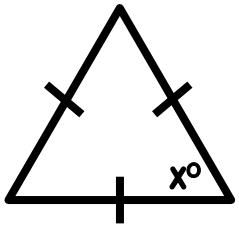
C. $109 = 180 + x$

B. $x = 180 - 109$

D. $x + 42 = 67$

15

Which equation can be used to find the value of x?



A. $3x = 180$

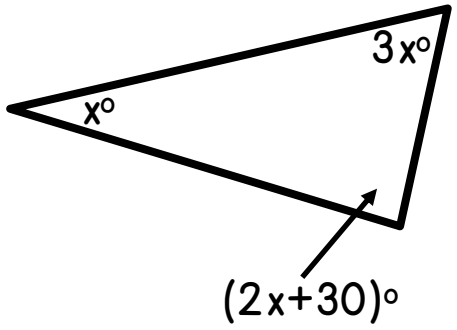
C. $x + x + x = 90$

B. $x = 180$

D. $x = 90$

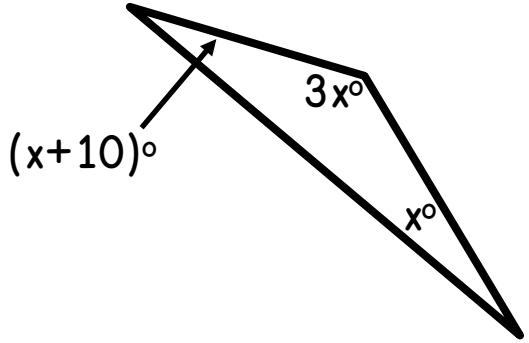
16

Use the diagram below to find x. Then, find the angle measures.



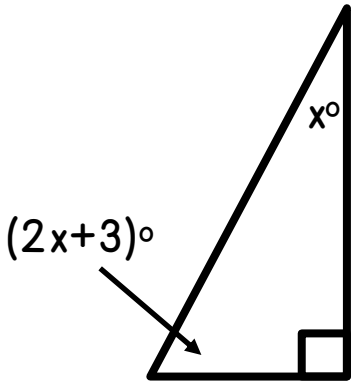
17

Use the diagram below to find x. Then, find the angle measures.



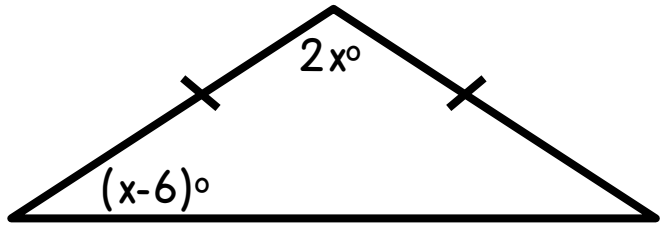
18

Use the diagram below to find x. Then, find the angle measures.



19

Use the diagram below to find x. Then, find the angle measures.



20

Read the statement below, draw a picture, and solve for the missing angle.

In an isosceles triangle, one angle is 20° more than twice the measure of the one of the equal angles. Find the measures of each angle.

21

Read the statement below, draw a picture, and solve for the missing angle.

In a scalene triangle the smallest angle is 10 less than the middle angle. The largest angle is twice the middle angle. Find the measures of each angle.

22

Read the statement below, draw a picture, and solve for the missing angle.

In an isosceles triangle, one angle is 25° more than three times the measure of the one of the equal angles. Find the measures of each angle.

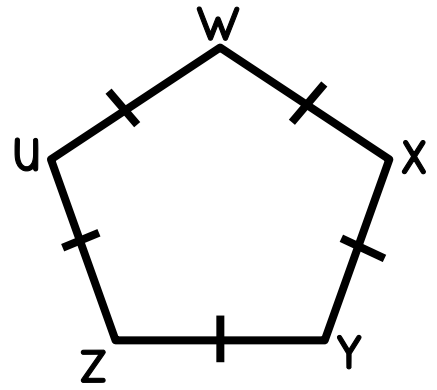
23

Read the statement below, draw a picture, and solve for the missing angle.

A right triangle has two equal angles. Find the measure of each angle.

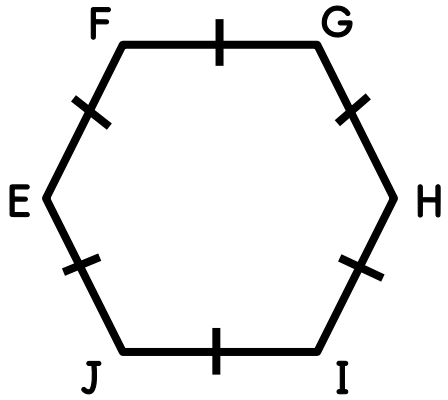
24

The sum of the interior angles in the figure below is 540°. What is the measure of angle X?



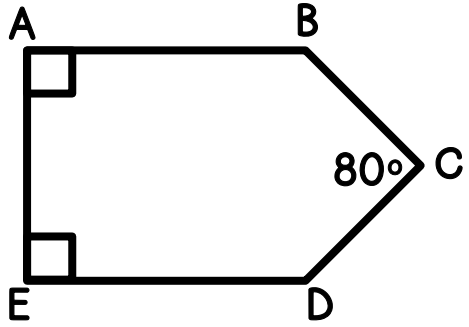
25

The sum of the interior angles in the figure below is 720°. What is the measure of angle J?



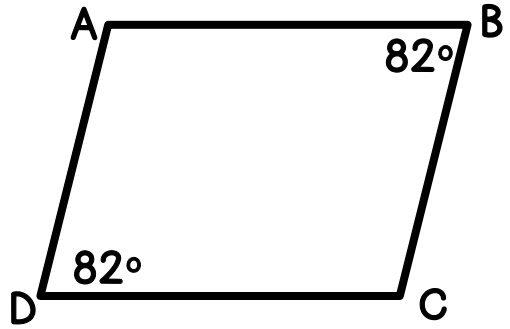
26

The sum of the interior angles in the figure below is 540°. If angle B and angle D are congruent, then what is the measure of angle B?



27

The sum of the interior angles in the figure below is 360°. If angle A and angle C are congruent, then what is the measure of angle A?



28

Unit: Angles & Triangles
Task Cards

Name_____
Date _____ Pd ____

WRITING EQUATIONS WITH GEOMETRY CONCEPTS

Show your work for each problem in the correct box.

1	2	3	4
5	6	7	8
9	10	11	12

13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28

Unit: Angles & Triangles
Task Cards

Name_____
Date _____ Pd ____

WRITING EQUATIONS WITH GEOMETRY CONCEPTS

Show your work for each problem in the correct box.

1 112°	2 74°	3 34°	4 50°
5 Yes, <A = 45°	6 No, <A = 109°	7 No, <A = 120°	8 Yes, <A = 78°
9 <R = 55°	10 <N = 58°	11 <E = 39°	12 <Z = 100°

13 C	14 D	15 B	16 A
17 x = 25 25°, 75°, 80°	18 x = 34 34°, 102°, 44°	19 x = 29 29°, 90°, 61°	20 x = 48 96°, 42°, 42°
21 x = 40 40°, 40°, 100°	22 x = 47.5 37.5°, 47.5°, 95°	23 x = 31 31°, 31°, 118°	24 x = 45 45°, 45°, 90°
25 108°	26 120°	27 140°	28 98°