Angle Word Problems Worksheets

1. The measures of two supplementary angles are in the ratio of 2: 3. Find the measurements of the two angles.

2. In a pair of complementary angles, the measurement of the larger angle is three times that of the smaller angle. Find the measurements of the two angles.

3. The measure of a complement of an angle is 32° more than three times the angle. Find the measurement of the two angles.

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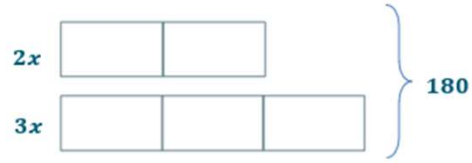
$$2x + 3x = 180$$
$$5x = 180$$
$$\left(\frac{1}{5}\right)5x = \left(\frac{1}{5}\right)180$$
$$x = 36$$

Angle 1 $= 2(36)° = 72°$

Angle 2 $= 3(36)° = 108°$

2. In a pair of complementary angles, the measurement of the larger angle is three times that of the smaller angle. Find the measurements of the two angles.

$$x + 3x = 90$$
$$4x = 90$$
$$\left(\frac{1}{4}\right)4x = \left(\frac{1}{4}\right)90$$
$$x = 22.5$$

Angle 1 $= 22.5°$

Angle 2 $= 3(22.5)° = 67.5°$

3. The measure of a complement of an angle is 32° more than three times the angle. Find the measurement of the two angles.

$$x + (3x + 32) = 90$$
$$4x + 32 - 32 = 90 - 32$$
$$4x = 58$$
$$\left(\frac{1}{4}\right)4x = \left(\frac{1}{4}\right)58$$
$$x = 14.5$$

Angle 1 $= 14.5°$

Angle 2 $= 3(14.5)° + 32° = 75.5°$

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