



## Complementary & Supplementary Angles

Name \_\_\_\_\_

Score \_\_\_\_\_

CS:19

- 1) Angle 1 and 2 are complementary angles. If  $m\angle 1 = 18^\circ$  and  $m\angle 2 = (x - 3)^\circ$ , find the value of  $x$  and  $m\angle 2$ .

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- 2) Angle  $a$  and  $b$  are supplementary angles. If  $m\angle a = (x - 40)^\circ$  and  $m\angle b = (x + 20)^\circ$ , find the value of  $x$ ,  $m\angle a$  and  $m\angle b$ .

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- 3) Angle  $u$  and  $v$  are supplementary angles. If  $m\angle u = (5x)^\circ$  and  $m\angle v = 25^\circ$ , find the value of  $x$ .

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- 4) Angle 3 and 4 are supplementary angles. If  $m\angle 4 = 114^\circ$  and  $m\angle 3 = (11x)^\circ$ , find the value of  $x$  and  $m\angle 3$ .

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- 5) Angle  $p$  and  $q$  are complementary angles. If  $m\angle p = (3x + 2)^\circ$  and  $m\angle q = (3x - 8)^\circ$ , find the value of  $x$ ,  $m\angle p$  and  $m\angle q$ .

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# Complementary & Supplementary Angles

Answer key

Name \_\_\_\_\_

Score \_\_\_\_\_

CS:19

- 1) Angle 1 and 2 are complementary angles. If  $m\angle 1 = 18^\circ$  and  $m\angle 2 = (x - 3)^\circ$ , find the value of  $x$  and  $m\angle 2$ .

**$x = 75$  ;  $m\angle 2 = 72^\circ$**

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- 2) Angle a and b are supplementary angles. If  $m\angle a = (x - 40)^\circ$  and  $m\angle b = (x + 20)^\circ$ , find the value of  $x$ ,  $m\angle a$  and  $m\angle b$ .

**$x = 100$  ;  $m\angle a = 60^\circ$  ;  $m\angle b = 120^\circ$**

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- 3) Angle u and v are supplementary angles. If  $m\angle u = (5x)^\circ$  and  $m\angle v = 25^\circ$ , find the value of  $x$ .

**$x = 31$**

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- 4) Angle 3 and 4 are supplementary angles. If  $m\angle 4 = 114^\circ$  and  $m\angle 3 = (11x)^\circ$ , find the value of  $x$  and  $m\angle 3$ .

**$x = 6$  ;  $m\angle 3 = 66^\circ$**

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- 5) Angle p and q are complementary angles. If  $m\angle p = (3x + 2)^\circ$  and  $m\angle q = (3x - 8)^\circ$ , find the value of  $x$ ,  $m\angle p$  and  $m\angle q$ .

**$x = 16$  ;  $m\angle p = 50^\circ$  ;  $m\angle q = 40^\circ$**

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