



## Complementary & Supplementary Angles

Name \_\_\_\_\_

Score \_\_\_\_\_

CS:21

- 1) Angle 3 and 4 are supplementary angles. If  $m\angle 3 = (x)^\circ$  and  $m\angle 4 = (3x - 8)^\circ$ , find the value of  $x$ ,  $m\angle 3$  and  $m\angle 4$ .

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- 2) Angle  $s$  and  $t$  are supplementary angles. If  $m\angle t = (12x)^\circ$  and  $m\angle s = (6x)^\circ$ , find the value of  $x$ .

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- 3) Angle 1 and 2 are complementary angles. If  $m\angle 2 = 56^\circ$  and  $m\angle 1 = (x + 2)^\circ$ , find the value of  $x$  and  $m\angle 1$ .

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- 4) Angle  $c$  and  $d$  are complementary angles. If  $m\angle c = (x + 3)^\circ$  and  $m\angle d = (3x + 7)^\circ$ , find the value of  $x$ ,  $m\angle c$  and  $m\angle d$ .

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- 5) Angle 5 and 6 are supplementary angles. If  $m\angle 6 = (x - 1)^\circ$  and  $m\angle 5 = 40^\circ$ , find the value of  $x$  and  $m\angle 6$ .

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# Complementary & Supplementary Angles

## Answer key

Name \_\_\_\_\_

Score \_\_\_\_\_

CS:21

- 1) Angle 3 and 4 are supplementary angles. If  $m\angle 3 = (x)^\circ$  and  $m\angle 4 = (3x - 8)^\circ$ , find the value of  $x$ ,  $m\angle 3$  and  $m\angle 4$ .

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**$x = 47$  ;  $m\angle 3 = 47^\circ$  ;  $m\angle 4 = 133^\circ$**

- 2) Angle  $s$  and  $t$  are supplementary angles. If  $m\angle t = (12x)^\circ$  and  $m\angle s = (6x)^\circ$ , find the value of  $x$ .

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**$x = 10$**

- 3) Angle 1 and 2 are complementary angles. If  $m\angle 2 = 56^\circ$  and  $m\angle 1 = (x + 2)^\circ$ , find the value of  $x$  and  $m\angle 1$ .

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**$x = 32$  ;  $m\angle 1 = 34^\circ$**

- 4) Angle  $c$  and  $d$  are complementary angles. If  $m\angle c = (x + 3)^\circ$  and  $m\angle d = (3x + 7)^\circ$ , find the value of  $x$ ,  $m\angle c$  and  $m\angle d$ .

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**$x = 20$  ;  $m\angle c = 23^\circ$  ;  $m\angle d = 67^\circ$**

- 5) Angle 5 and 6 are supplementary angles. If  $m\angle 6 = (x - 1)^\circ$  and  $m\angle 5 = 40^\circ$ , find the value of  $x$  and  $m\angle 6$ .

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**$x = 141$  ;  $m\angle 6 = 140^\circ$**