

Complementary and Supplementary Angles - Worksheet

Skill

Group A - Complementary angles

Find the complement of each angle:

1) 68°

2) 33°

3) 87°

4) 71°

5) 8°

6) 80°

7) 6°

8) 16°

9) 28°

10) 34°

11) 47°

12) 89°

Group B - Supplementary angles

Find the supplement of each angle:

1) 108°

2) 36°

3) 6°

4) 178°

5) 161°

6) 90°

7) 57°

8) 28°

9) 72°

10) 127°

11) 149°

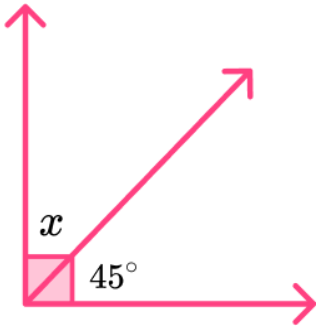
12) 87°

Complementary and Supplementary Angles - Worksheet

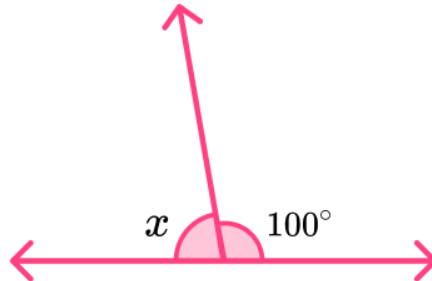
Group C - Complementary and supplementary angles

Find the value of x :

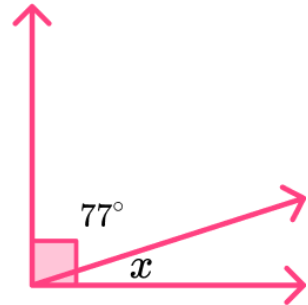
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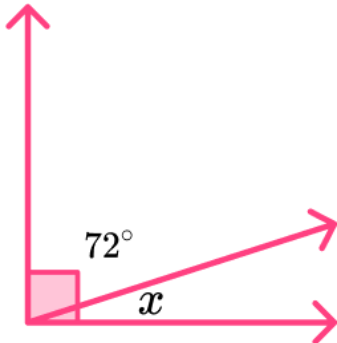
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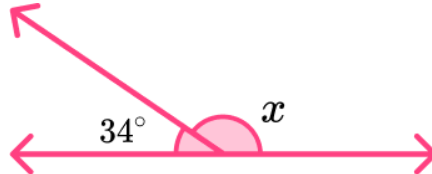
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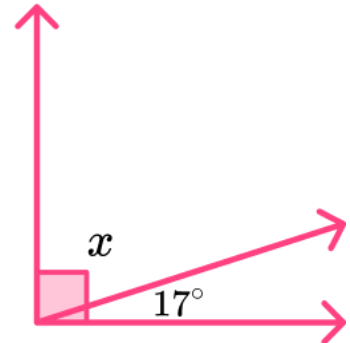
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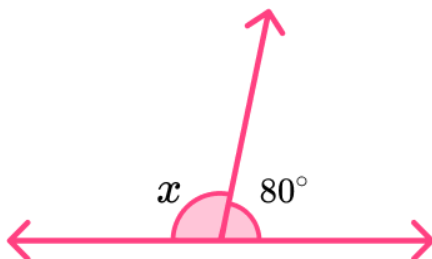
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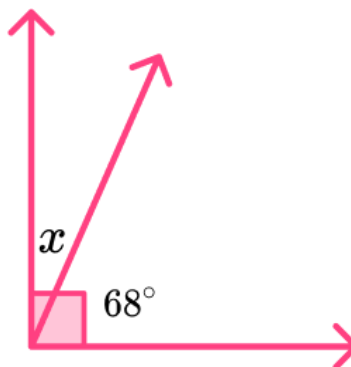
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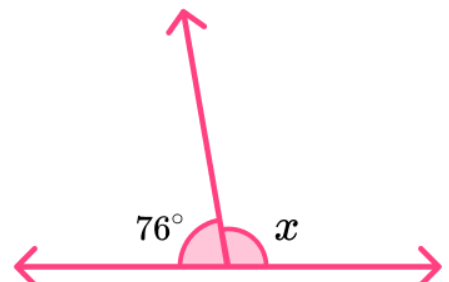
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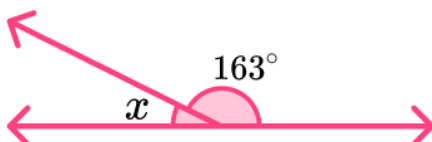
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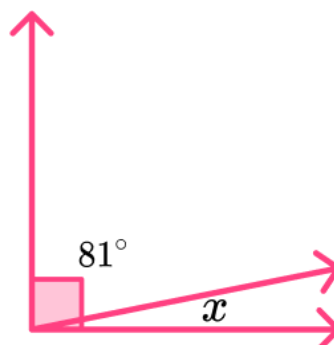
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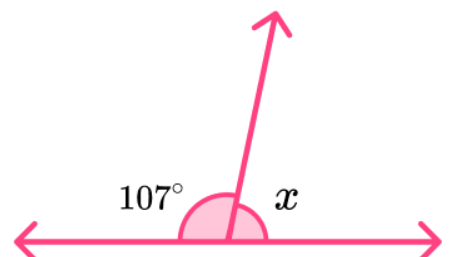
10)



11)



12)



Complementary and Supplementary Angles - Worksheet

Applied

1) Match the following:

Supplement of 50°

130°

Complement of 145°

63°

Supplement of 27°

35°

Complement of 50°

40°

2) State whether the given pairs are complementary or supplementary.

(a) 75° , 105°

(b) 76° , 14°

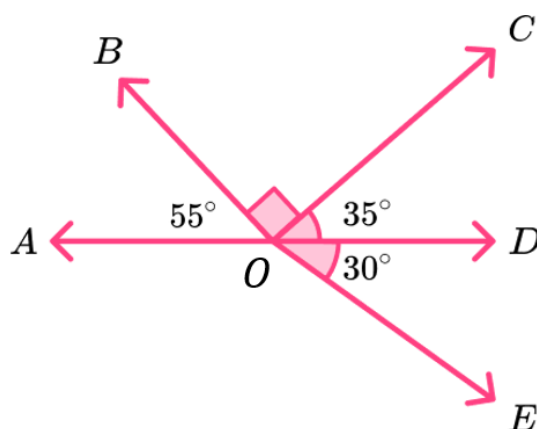
(c) 62° , 28°

(d) 118° , 62°

(e) 132° , 48°

(f) 19° , 71°

3) From the diagram below,



(a) Name a pair of nonadjacent complementary angles.

(b) Find the measure of the angle supplementary to 30°

Complementary and Supplementary Angles - Exam Questions

- 1) (a) Circle the set of complementary angles.



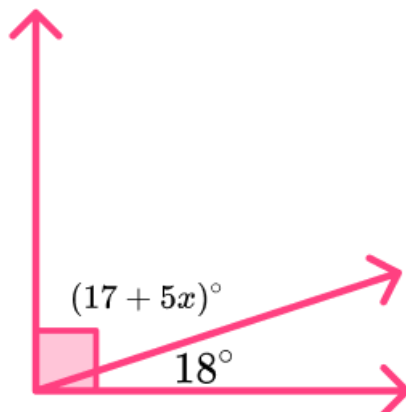
(1)

- (b) Circle the set of supplementary angles.



(1)
(2 marks)

- 2) (a) Find the value of x .



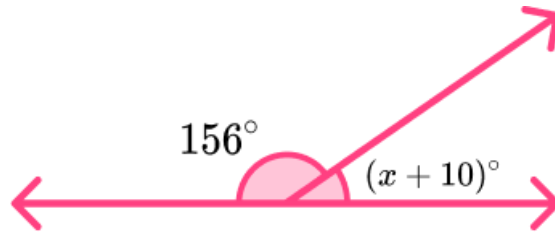
.....
(3)

- (b) Give a reason for your answer.

.....
(1)
(4 marks)

Complementary and Supplementary Angles - Exam Questions

- 3) (a) Find the value of x .



.....
(2)

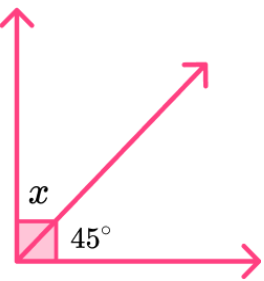
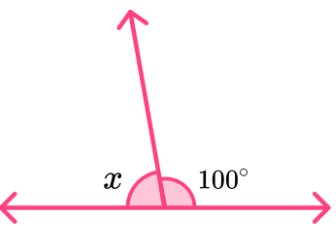
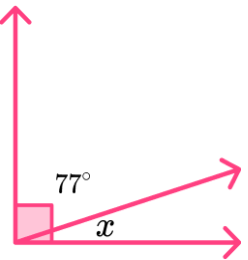
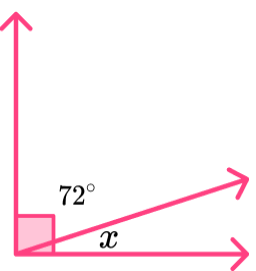
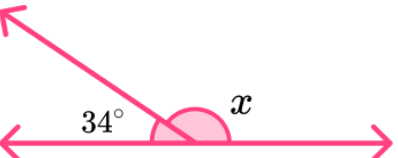
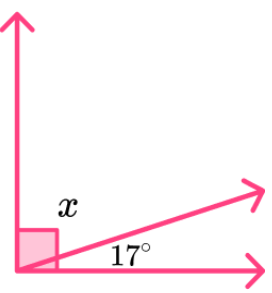
- (b) Give a reason for your answer.

.....
(1)
(3 marks)

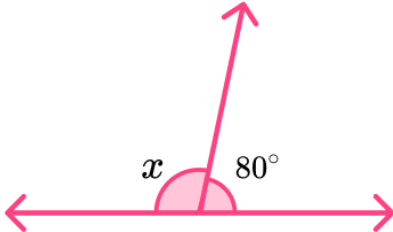
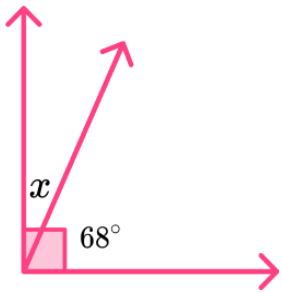
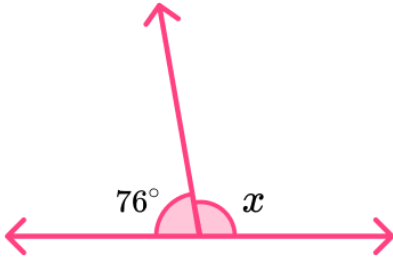
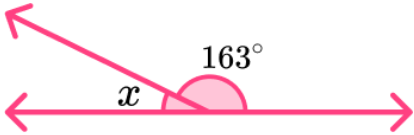
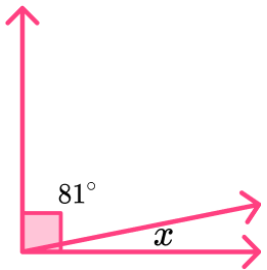
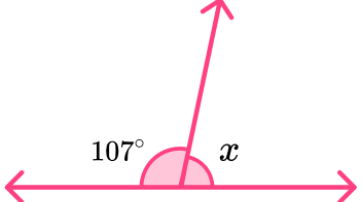
Complementary and Supplementary Angles - Answers

	Question	Answer
	Skill Questions	
Group A	Find the complement of each angle: 1) 68° 2) 33° 3) 87° 4) 71° 5) 8° 6) 80° 7) 6° 8) 16° 9) 28° 10) 34° 11) 47° 12) 89°	1) 22° 2) 57° 3) 3° 4) 19° 5) 82° 6) 10° 7) 84° 8) 74° 9) 62° 10) 56° 11) 43° 12) 1°
Group B	Find the supplement of each angle: 1) 108° 2) 36° 3) 6° 4) 178° 5) 161° 6) 90° 7) 57° 8) 28° 9) 72° 10) 127° 11) 149° 12) 87°	1) 72° 2) 144° 3) 174° 4) 2° 5) 19° 6) 90° 7) 123° 8) 152° 9) 108° 10) 53° 11) 31° 12) 93°

Complementary and Supplementary Angles - Answers

Group C	<p>Find the value of x:</p> <p>1) </p> <p>2) </p> <p>3) </p> <p>4) </p> <p>5) </p> <p>6) </p>	<p>1) 45°</p> <p>2) 80°</p> <p>3) 13°</p> <p>4) 18°</p> <p>5) 146°</p> <p>6) 73°</p>
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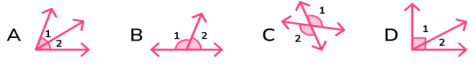
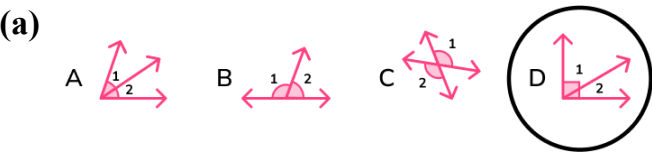
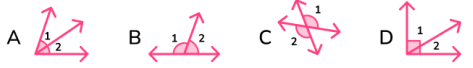
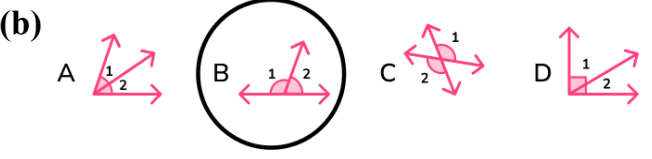
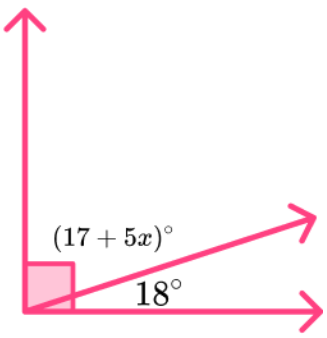
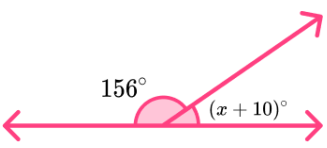
Complementary and Supplementary Angles - Answers

Group C contd	<p>7)</p>  <p>8)</p>  <p>9)</p>  <p>10)</p>  <p>11)</p>  <p>12)</p> 	<p>7) 100°</p> <p>8) 22°</p> <p>9) 104°</p> <p>10) 17°</p> <p>11) 9°</p> <p>12) 73°</p>
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Complementary and Supplementary Angles - Answers

	Question	Answer
	Applied Questions	
1)	<p>Match the following</p> <div><div>Supplement of 50°</div><div>Complement of 145°</div><div>Supplement of 27°</div><div>Complement of 50°</div></div> <div><div>130°</div><div>63°</div><div>35°</div><div>40°</div></div>	
2)	<p>State whether the given pairs are complementary or supplementary.</p> <p>a) 75°, 105° b) 76°, 14° c) 62°, 28° d) 118°, 62° e) 132°, 48° f) 19°, 71°</p>	<p>a) Supplementary b) Complementary c) Complementary d) Supplementary e) Supplementary f) Complementary</p>
3)	<p>From the diagram below</p>	<p>a) 55° (AOB) and 35° (COD) b) 150°</p>

Complementary and Supplementary Angles - Mark Scheme

	Question	Answer
	Exam Questions	
1) (a)	Circle the set of complementary angles. 	(a)  (1)
(b)	Circle the set of supplementary angles. 	(b)  (1)
2) (a)	Find the value of x . 	(a) $5x + 17 + 18 = 90$ or $5x + 35 = 90$ $5x = 55$ $x = 11^\circ$ (1) (1) (1)
(b)	Give a reason for your answer.	(b) Angles making a right angle are Complementary angles / add to 90° (1)
3) (a)	Find the value of x . 	(a) $x + 10 + 156 = 180$ or $x + 166 = 180$ $x = 14^\circ$ (1) (1)
(b)	Give a reason for your answer.	(b) Angles on a straight line are Supplementary angles / add to 180° (1)

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