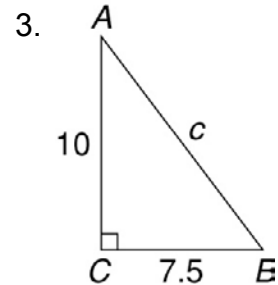
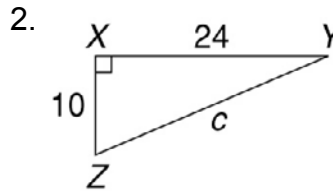
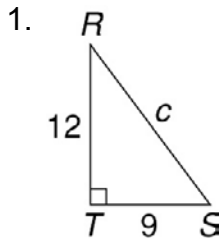


LESSON
8

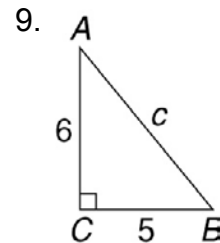
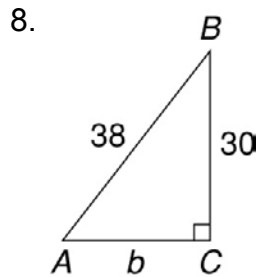
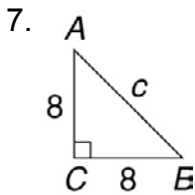
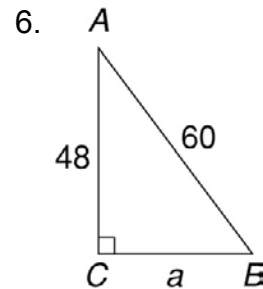
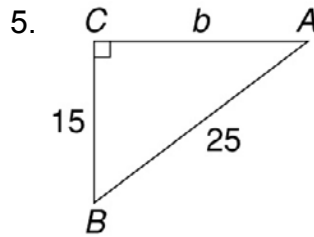
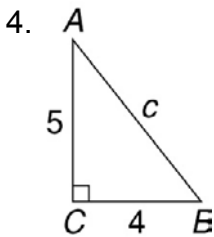
Exponents and Roots

Practice A: The Pythagorean Theorem

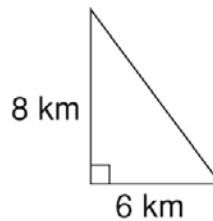
Find the length of the hypotenuse in each triangle using the Pythagorean Theorem, $a^2 + b^2 = c^2$.



Solve for the unknown side in each right triangle to the nearest tenth.



10. Jan and her brother Mel go to different schools. Jan goes 6 kilometers east from home. Mel goes 8 kilometers north. How many kilometers apart are their schools?



Puzzles, Twisters & Teasers

- | | |
|------|-------|
| 1. S | 2. D |
| 3. K | 4. O |
| 5. C | 6. N |
| 7. L | 8. T |
| 9. E | 10. P |

D O N ' T

O P E N L O C K S

Answers for Lesson 8

Practice A

- | | |
|---------|-----------|
| 1. 15 | 2. 26 |
| 3. 12.5 | 4. 6.4 |
| 5. 20 | 6. 36 |
| 7. 11.3 | 8. 23.3 |
| 9. 7.8 | 10. 10 km |

Practice B

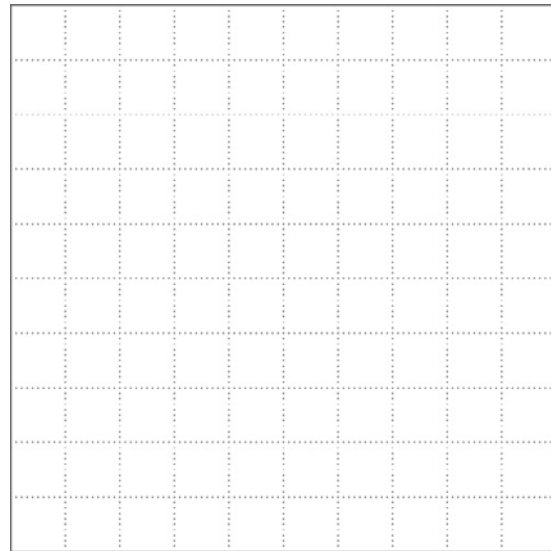
- | | |
|---------|-----------|
| 1. 13 | 2. 10.5 |
| 3. 51 | 4. 14.1 |
| 5. 13.4 | 6. 20 |
| 7. 18.2 | 8. 17.7 |
| 9. 72 | 10. 17 mi |

Practice C

- | | |
|----------|--------------|
| 1. 42 | 2. 122 |
| 3. 25.5 | 4. 17 |
| 5. 1.2 | 6. 21.4 |
| 7. 40.9 | 8. 24.1 |
| 9. 40 | 10. 78 |
| 11. 51.2 | 12. 72 |
| 13. 60 | 14. $b = 45$ |
| 15. 19.8 | |

Review for Mastery

1.



- | | |
|----------------|----------------|
| 2. $5^2; 12^2$ | 3. $8^2; 15^2$ |
| 25; 144 | 64; 225 |
| 169 | 289 |
| 13 | 17 |

- $12^2; 15^2$
 144; 225
 144; 144
 81
 9

- | | |
|-----------------|-----------------|
| 4. $12^2; 20^2$ | 5. $24^2; 26^2$ |
| 144; 400 | 576; 676 |
| 144; 144 | 576; 576 |
| 256 | 100 |
| 16 | 10 |

Challenge

- consecutive odd numbers
- $C = B + 1$
- results = Column B

row 3	$3 \times 7 + 3 = 24$
row 4	$4 \times 9 + 4 = 40$
row 5	$5 \times 11 + 5 = 60$

4. $A^2 = B + C$