

Bonus Assignment #2 - Due the first day of class

Date _____

Factor the common factor out of each expression.

1) $20x^4 + 32x - 12$

Factor each completely.

2) $n^2 - n$

3) $k^2 + 9k + 8$

4) $x^2 + 2x + 1$

5) $4v^2 - 1$

6) $9r^2 - 16$

7) $5x^2 + 10x - 175$

$$8) 3x^2 + 3x - 18$$

$$9) 5x^2 - 16x + 3$$

$$10) 5b^2 - 32b - 64$$

Simplify.

$$11) \sqrt{150}$$

$$12) \sqrt{200}$$

$$13) \sqrt{512}$$

$$14) \sqrt{24}$$

$$15) \sqrt{288}$$

$$16) 8\sqrt{100}$$

$$17) 2\sqrt{147}$$

$$18) -8\sqrt{200}$$

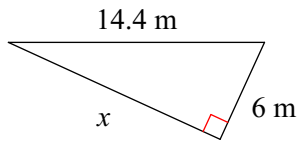
$$19) 4\sqrt{288}$$

$$20) -5\sqrt{343}$$

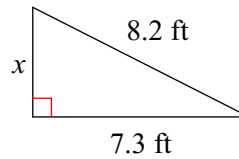
Bonus Assignment #2

Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

1)

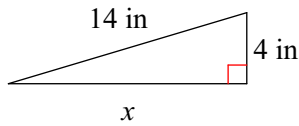


2)

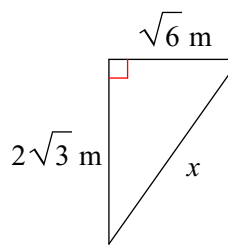


Find the missing side of each triangle. Leave your answers in simplest radical form.

3)

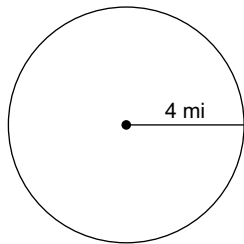


4)

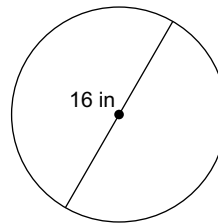


Find the area of each. Use your calculator's value of π . Round your answer to the nearest tenth.

5)

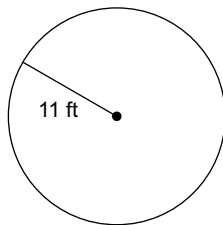


6)

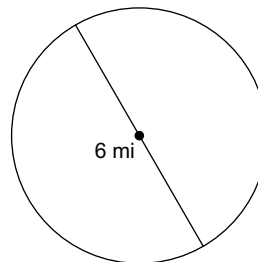


Find the circumference of each circle. Give the exact answer.

7)

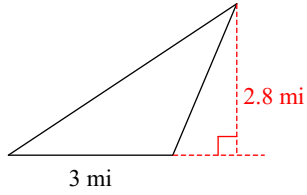


8)

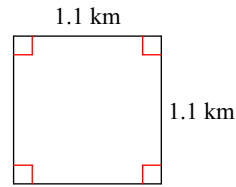


Find the area of each.

9)

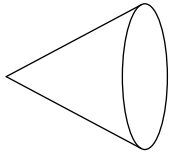


10)

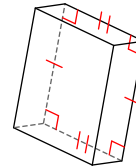


Name each figure.

11)

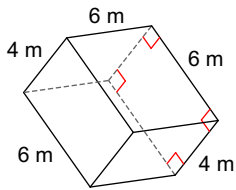


12)



Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

13)

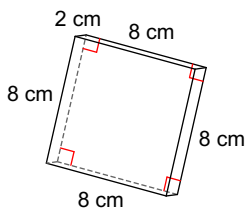


14)



Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

15)



Answers to Bonus Assignment #2 - Due the first day of class (ID: 1)

1) $4(5x^4 + 8x - 3)$

3) $(k + 1)(k + 8)$

5) $(2v + 1)(2v - 1)$

7) $5(x + 7)(x - 5)$

9) $(5x - 1)(x - 3)$

11) $5\sqrt{6}$

13) $16\sqrt{2}$

15) $12\sqrt{2}$

17) $14\sqrt{3}$

19) $48\sqrt{2}$

Answers to Bonus Assignment #2 (ID: 1)

- 1) 13.1 m
- 9) 4.2 mi²

- 3) $6\sqrt{5}$ in
- 11) cone

- 5) 50.3 mi²
- 13) 144 m³

- 7) 22π ft
- 15) 192 cm²