

Topics:

Circles- 3 questions

Proportions/Triangle Midsegment- 2 questions

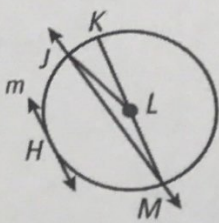
Right Triangle Trig- 4 questions

Triangle Congruency- 2 questions

Radicals/Polynomials- 8 questions

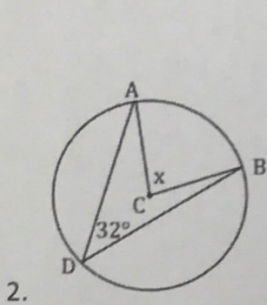
Factoring- 6 questions

List all of the lines/segments that intersect the circle

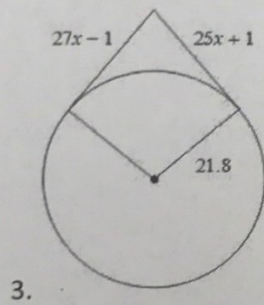


radii : $\overline{LJ}, \overline{LK}, \overline{LM}$
 diameter : \overline{KM}
 chord : $\overline{JM}, \overline{JM}$
 secant : \overleftrightarrow{JM}
 tangent : line m

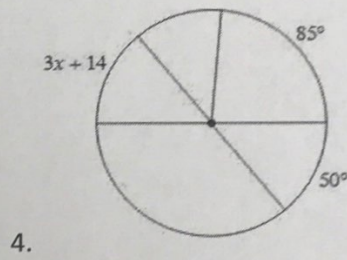
Solve for x:



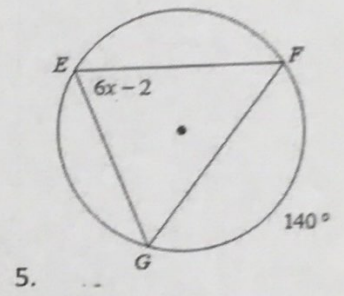
$x = 64$



$x = 1$

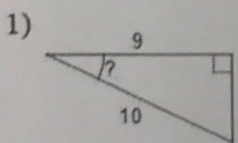


$x = 12$

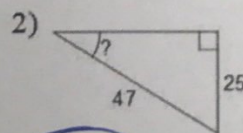


$x = 12$

Find the measure of the indicated angle to the nearest degree.



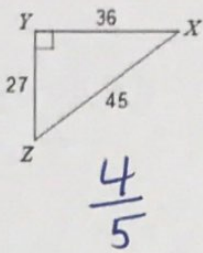
- A) 42°
- B) 48°
- C) 64°
- D) 26°



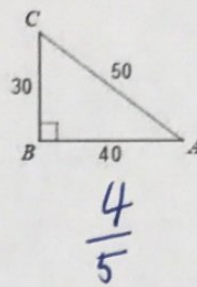
- A) 32°
- B) 35°
- C) 62°
- D) 28°

Find the value of each trigonometric ratio.

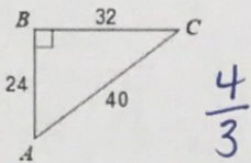
3) $\sin Z$



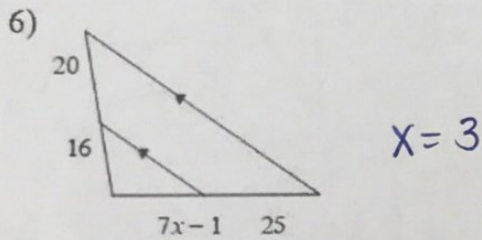
4) $\cos A$



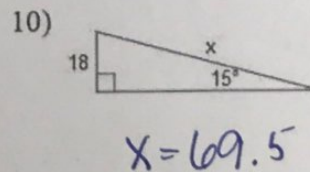
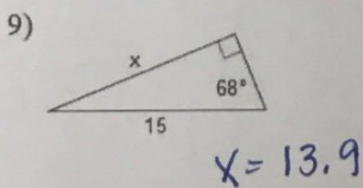
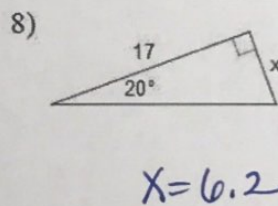
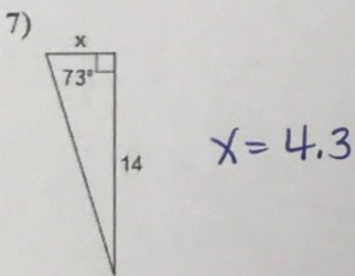
5) $\tan A$



Solve for x .

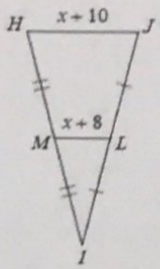


Find the missing side. Round to the nearest tenth.



Solve for x .

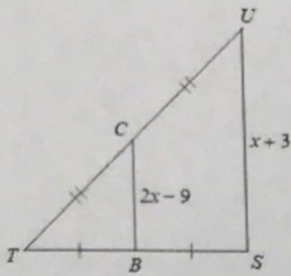
11)



$$x = -6$$

Find the missing length indicated.

12) Find SU



$$SU = 10$$

Factor each completely.

1) $5x^2 + 15x$

$$5x(x+3)$$

2) $3b^3 + 15b^2 - 6b$

$$3b(b^2 + 5b - 2)$$

3) $12p^2 + 4p - 8$

$$4(p+1)(3p-2)$$

4) $2n^4 + 7n^3 - 49n^2$

$$n^2(n+7)(2n-7)$$

5) $b^2 + 16b + 60$

$$(b+10)(b+6)$$

6) $x^2 - 19x + 90$

$$(x-10)(x-9)$$

7) $2m^2 - 18$

$$2(m+3)(m-3)$$

8) $25n^6 - 4$

$$(5n^3+2)(5n^3-2)$$

Name the type of Quadratic Expression (PST or DOTS) and Factor each completely.

9) $25m^2 - 1$

DOTS

$$(5m+1)(5m-1)$$

10) $9n^2 - 24n + 16$

PST

$$(3n-4)^2$$

Simplify each expression.

11) $(6 + n^3 - 3n) - (8 - 4n + 8n^4)$

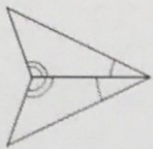
$$-8n^4 + n^3 + n - 2$$

12) $(6n^3 + 5n^2 + 7) + (2n^2 - 3 + n^3)$

$$7n^3 + 7n^2 + 4$$

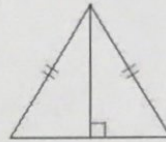
State if the two triangles are congruent. If they are, state how you know.

13)



ASA

14)



HL

Simplify.

16) $\sqrt{180}$

$$6\sqrt{5}$$

17) $-\sqrt{125}$

$$-5\sqrt{5}$$

18) $3\sqrt{54} - 3\sqrt{54} - 3\sqrt{27}$

$$-9\sqrt{3}$$

19) $-3\sqrt{3} - 3\sqrt{8} - 3\sqrt{18}$

$$-3\sqrt{3} - 15\sqrt{2}$$

20) $4\sqrt{10}(\sqrt{2} + \sqrt{3})$

$$8\sqrt{5} + 4\sqrt{30}$$

Find each product.

21) $(8n - 8)(4n - 3)$

$$32n^2 - 56n + 24$$

22) $(3m - 1)(2m^2 + 5m - 8)$

$$6m^3 + 13m^2 - 29m + 8$$