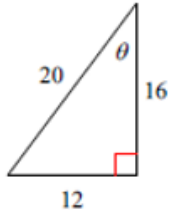# CHAPTER 13

TRIGONOMETRY

PRACTICE ASSIGNMENTS

Intermediate Algebra 2

Name: _____ HR: _____

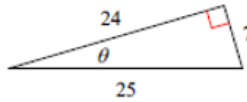## Concept 1: Trig Ratios

1)

Sin θ =
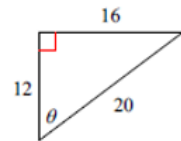
cos θ =

Tan θ =

2)

Sin θ =

cos θ =

Tan θ =

3)

Sin θ =

cos θ =

Tan θ =

4)

Sin θ =

cos θ =

Tan θ =

5)

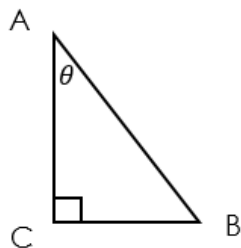

Sin θ =

cos θ =

Tan θ =
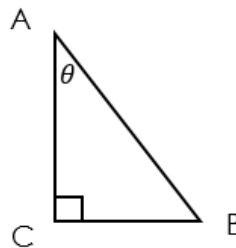
6)

Sin θ =

cos θ =

Tan θ =
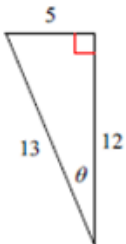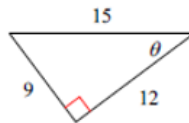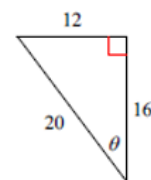
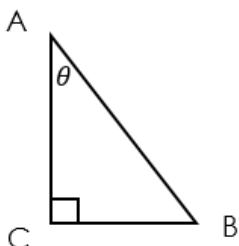**In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.**
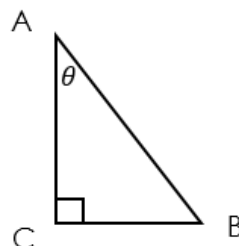
7) Find sin A if $b = 8$, $a = 15$, $c = 17$

8) Find cos A if $a = 12$, $b = 5$, $c = 13$

9) Find tan A if $c = 17$, $b = 8$, $a = 15$
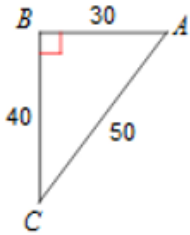

10) Find sin A if $c = 10$, $a = 8$, $b = 6$

2

Concept 2:

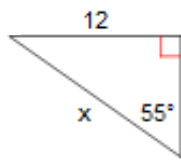**Find the value of each trigonometric ratio to the nearest ten-thousandth.**

11) $\cos A$

12) $\cos 17°$

13) $\tan 69°$
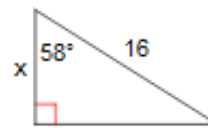
14) $\tan 53°$

Find the missing side. Round to the nearest tenth.

15)
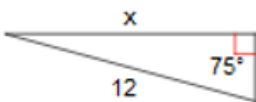

Know:
Need: } Use:

16)

Know:
Need: } Use:
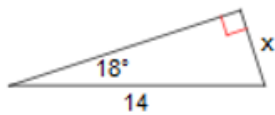
17)

Know:
Need: } Use:
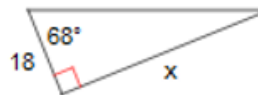
18)
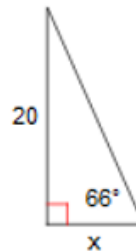
Know:
Need: } Use:

19)

Know:
Need: } Use:

20)

Know:
Need: } Use:

3

Concept 3:

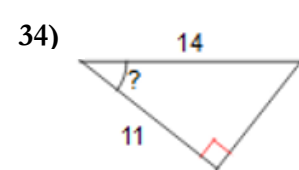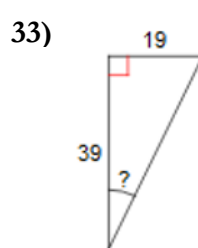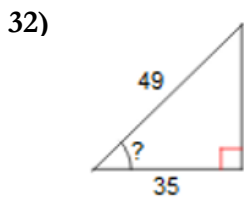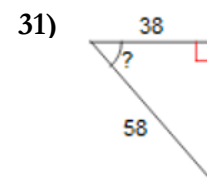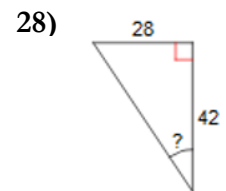**Find each angle measure to the nearest degree.**
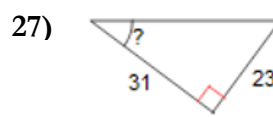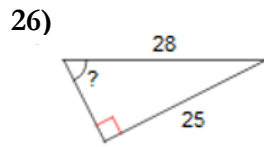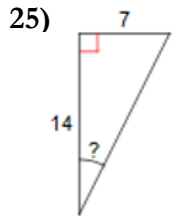
21) $\sin X = 0.9816$ **22)** $\tan C = 0.8693$ **23)** $\cos V = 0.8829$ **24)** $\tan V = 2.2460$

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

25)

7

14

?

26)

28

?

25

27)

?

31

23

28)

28

42

?

29)

31

22

?

30)

32

?

34

31)

38

?

58

32)

49

?

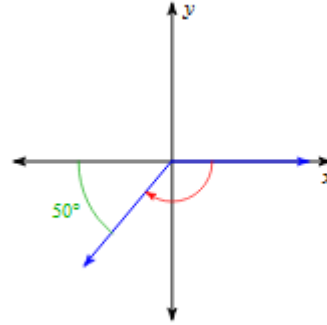35

33)

19

39

?

34)

14

?

11
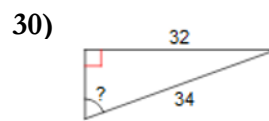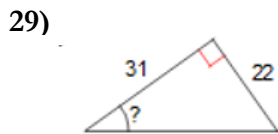
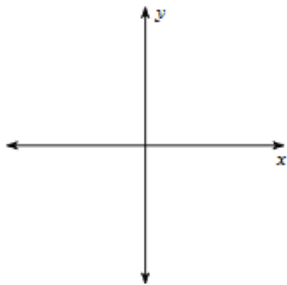## Concept 4:

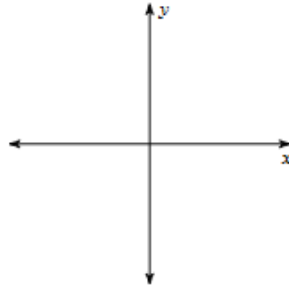**Find the measure of each angle.**

35)
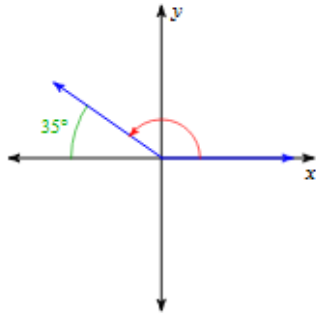
36)

Draw an angle with the given measure in standard position.

37) $270°$

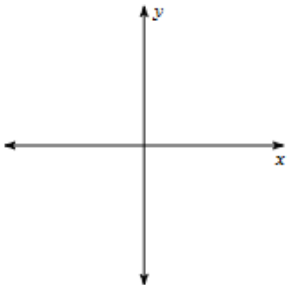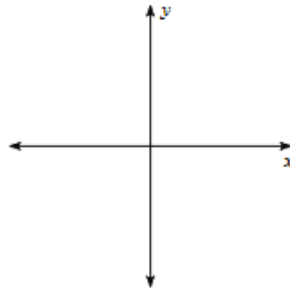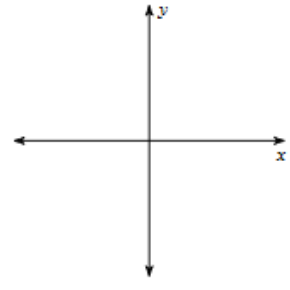38) $-305°$

39) $125°$
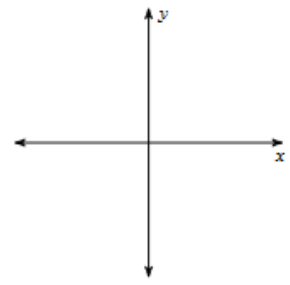
40) $-50°$

41) $-140°$

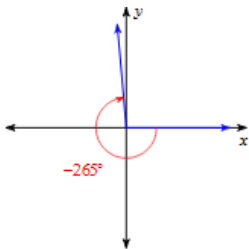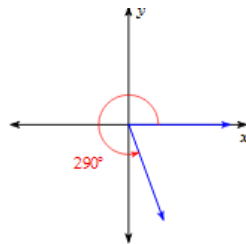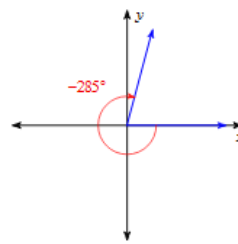
42) $140°$

Find the reference angle.
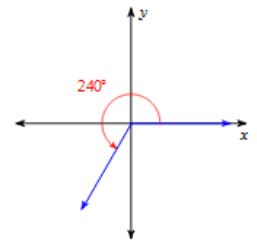
43)

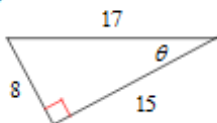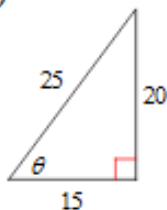44)

45)

46)

Chapter 13 Practice Test

Find the value of the trig function indicated.

1) cos θ

17

8

θ

15

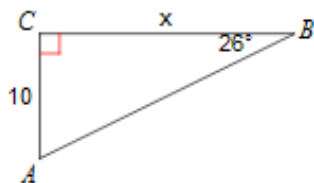2) tan θ

25

20

θ

15

3) sin θ

4

3

θ

5
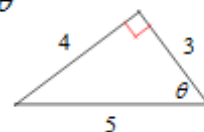
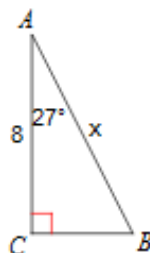**Use a calculator to find each. Round your answers to the nearest tenth.**

4) tan 225°

5) cos 56°

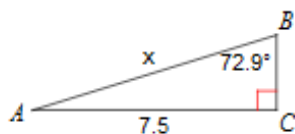**Find the measure of each side indicated. Round to the nearest tenth.**

6)

C   x   B
       26°
10

A

7)

A

8   27°   x

C   B

8)

B
x   72.9°
A   7.5   C

9)

B

x

65°
A   5   C

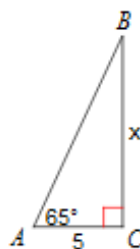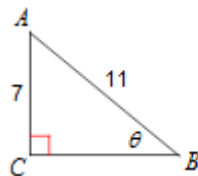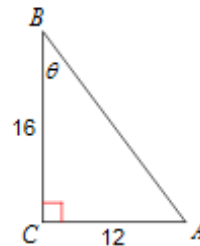**Find the measure of each angle indicated. Round to the nearest tenth.**

10)

A

7   11

θ
C   B

11)

B
θ
16

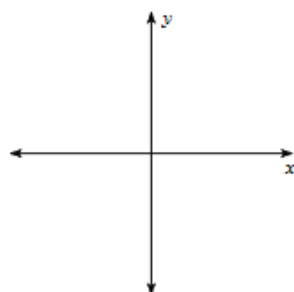C   12   A
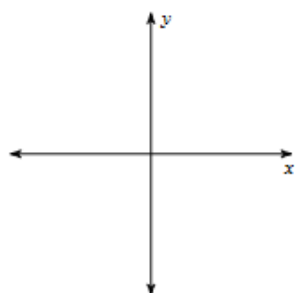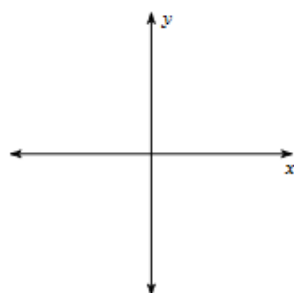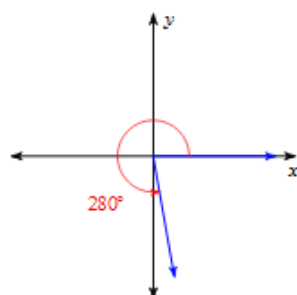
12)
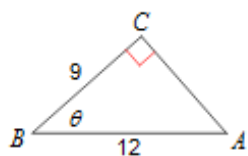
13)
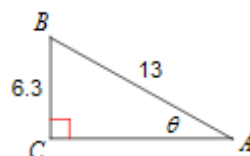
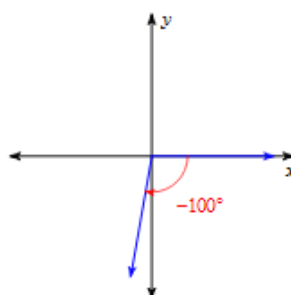
Draw an angle with the given measure in standard position.

14) 65°
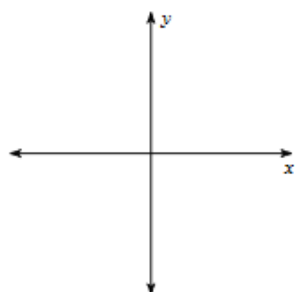
15) 105°

16) −85°

17) 250°

Find the reference angle.
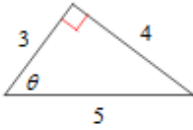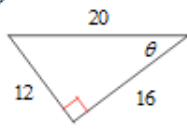
18)

280°

19)

−100°

Extra Trig Review

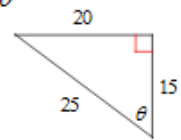**Find the value of the trig function indicated.**

1. $\tan \theta$

3 / □ / 4 / θ / 5

2. $\cos \theta$
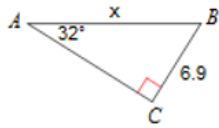
20 / θ / 12 / 16

3. $\sin \theta$
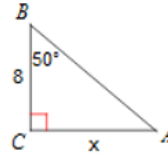
20 / 15 / 25 / θ

Find the measure of each side indicated. Round to the nearest tenth.

4)

A — x — B / 32° / 6.9 / C

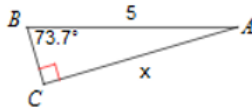5)

B / 50° / 8 / C — x — A
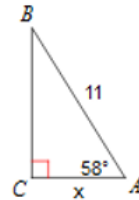
6)
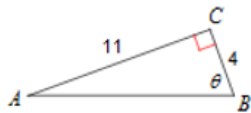
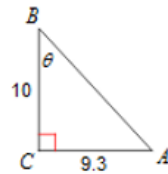B / 73.7° / 5 / A / x / C

7)

B / 11 / 58° / C — x — A

Find the measure of each angle indicated. Round to the nearest tenth.

8)

C / 11 / 4 / θ / A — B

9)

B / θ / 10 / C — 9.3 — A

10)

B / 12 / 4 / θ / A — C

11)

C / 10 / θ / B — 15 — A

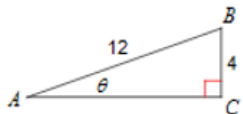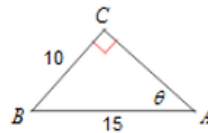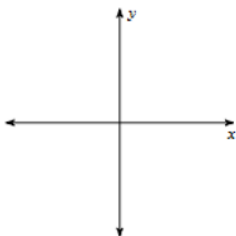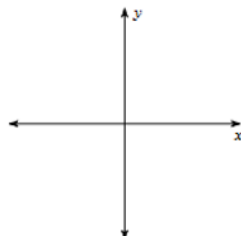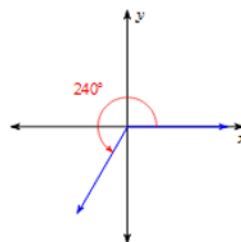**Draw an angle with the given measure in standard position.**

12) −80°

13) −5°

Find the reference angle.

14) 240°

15) −340°

8