1. Determine the approximate value of the sine of an angle measuring $0°$.
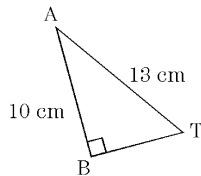
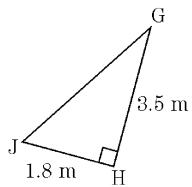2. In the triangle, calculate $\tan C$.
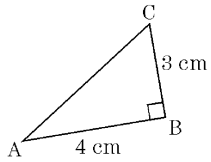
3. In the triangle shown, calculate $\sin A$.
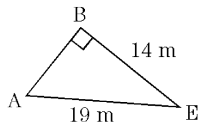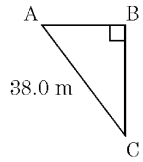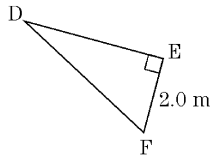

4. In the triangle shown, calculate $\cos A$.

5. In the triangle, determine $\angle G$ to the nearest degree.

6. In △ABC, calculate ∠A to the nearest degree given that AB = 18.0 cm.

    A ___ B
    38.0 m
    C

7. In △DEF, calculate DE to two decimal places given that ∠F = 35°.

    D
    E
    2.0 m
    F

8. In △ABC, calculate AB to the nearest centimetre given that ∠A = 57°.

    A ___ B
    38.0 m
    C
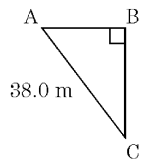
9. Solve △STU. Make your angle measures correct to the nearest degree and side measures to 1 decimal place.

    24.9 m   U
    S 28°
    T
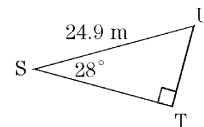
10. $a = 15$, $b = 11$, $A = 90°$

11. $a = 20$, $b = 30$, $C = 90°$

12. Two airplanes currently flying at the same altitude and in the same direction are approching a runway. The first plane must descend at an angle of $23°$ and the second, which is 3.2 miles behind the first, must descend at an angle of $18°$. To the nearest tenth of a mile, what is the present altitude of the planes?

13. A swimming pool is 40.0 feet long and 3.0 feet deep at one end. If it is 10.0 feet deep at the other end, find the total distance along the bottom.
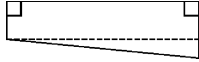
14. Find the exact value of each labelled part in the figure.
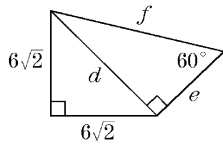
15. Thomas sights a tree 26 m distant and his eyes elevate 51° from horizontal to see the tree top. Thomas' eyes are 1.6 m above the ground. How tall, to the nearest tenth of a metre, is the tree?

16. From a window in an apartment house, the angle of elevation of the top of a bank across the street is 48° while the angle of depression of the base of the bank is 22°. If the two buildings are 17 meters apart, find the height of the bank. How high is the apartment window from the level of the street?

17. Find to the nearest tenth of a degree the angle opposite of the base of an isosceles triangle given the base of the triangle is 164.8 cm and the two congruent sides have length 84 cm.

MATH 10   RIGHTRIGONOMETRY Practice TEST   4/30/00

Answer List

1. 0

2. $\frac{4}{3}$

3. $\frac{14}{19}$

4. $\frac{10}{13}$

5. 27°

6. 62°

7. 1.40 m

8. 21 cm

9. ∠U = 62°, ST = 22.0 m, UT = 11.7 m

10.

11.

12. 4.4 mi

13. ≈ 40.6 ft

14. $d = 12,\ e = 4\sqrt{3},\ f = 8\sqrt{3}$

15. 33.7 m

16.

17. 157.6°

Catalog List

1. AW1 HE 2

2. AW1 HA 2

3. AW1 HB 4

4. AW1 HB 6

5. AW1 HA 6

6. AW1 HB 22

7. AW1 HA 16

8. AW1 HB 18

9. AW1 HC 16

10.

11.

12. TRI ML 51

13. TRI ML 63

14. TRI OH 58

15. AW1 HB 34

16.

17. TRI ML 72