Find each measurement indicated. Round your answers to the nearest tenth.

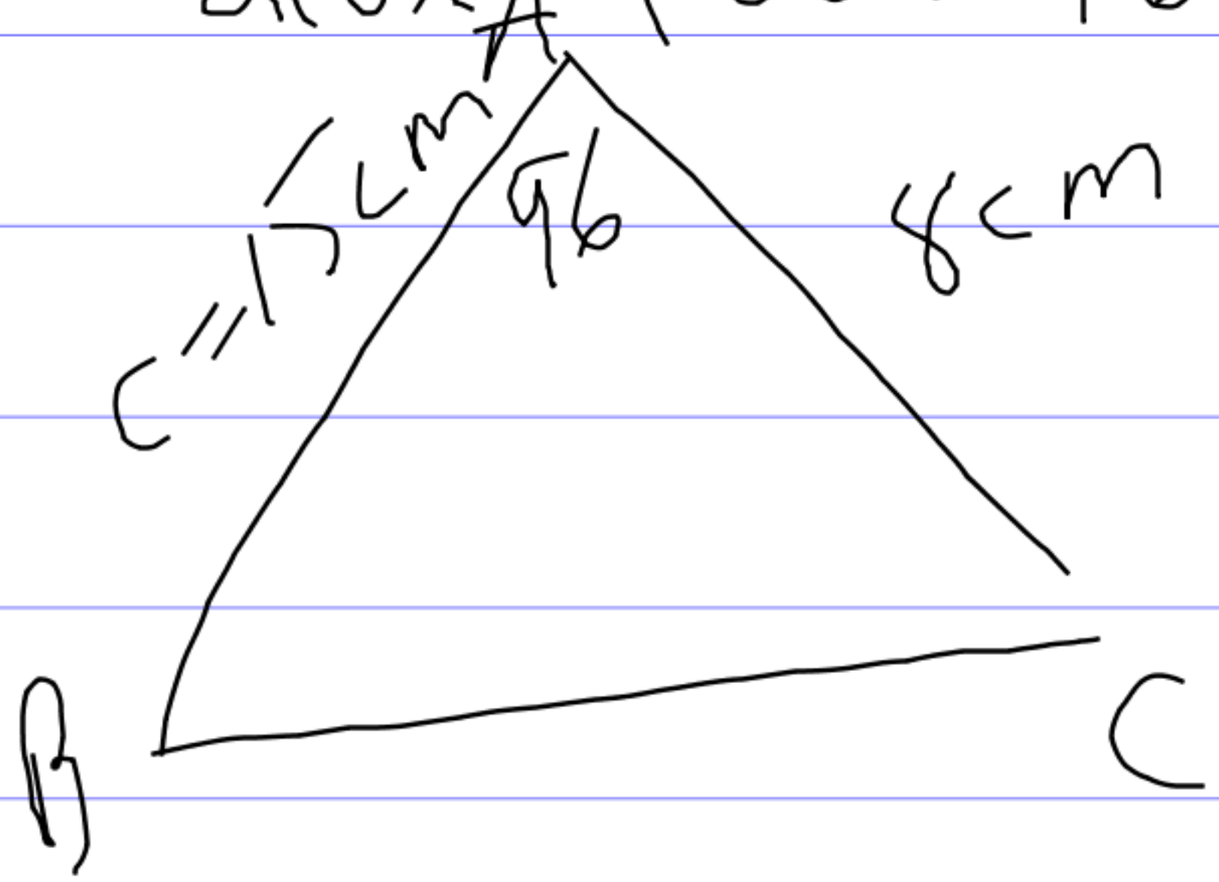
7) $m\angle A = 96°$, $b = 8$ cm, $c = 15$ cm
Find a

$a^2 = b^2 + c^2 - 2bc(\cos A)$

$a^2 = 8^2 + 15^2 - 2(8)(15)(\cos 96°)$

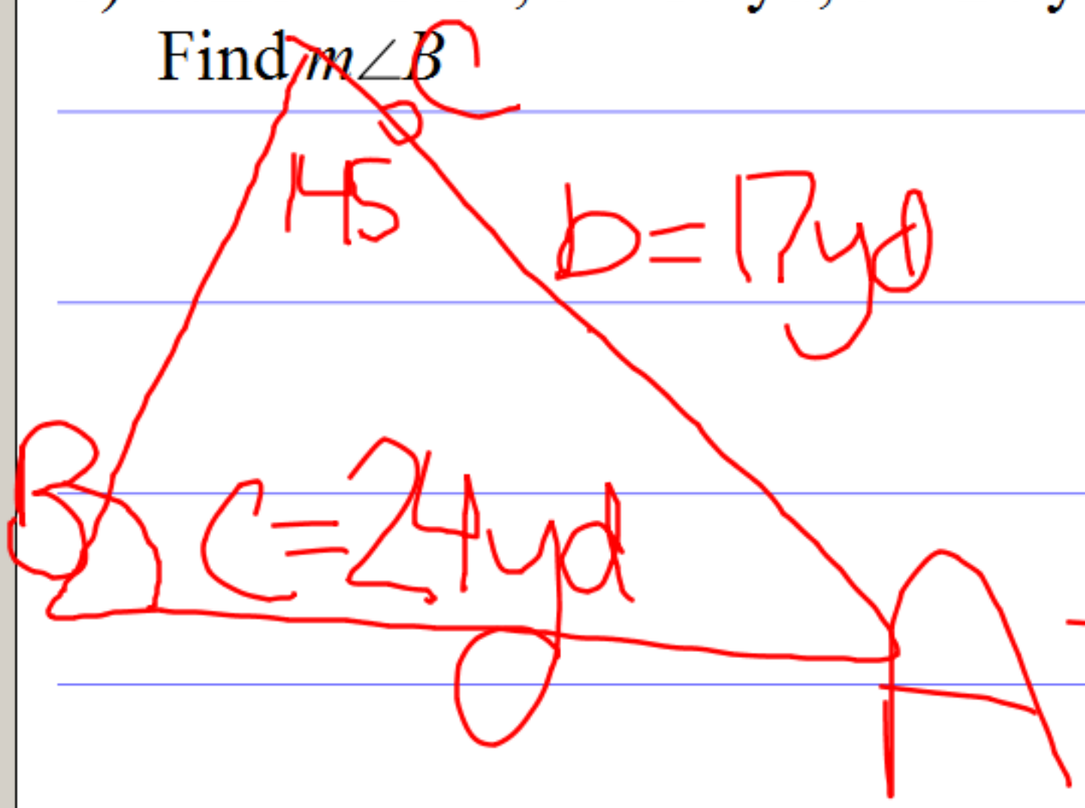
$a^2 = 314.1$

$a = 17.7$ cm



Find each measurement indicated. Round your answers to the nearest tenth.

8) $m\angle C = 145°$, $b = 17$ yd, $c = 24$ yd
Find $m\angle B$



a =
b = 17 yd
c = 24 yd

∠A =
∠B = 21°
∠C = 14°

$$\frac{\sin C}{c} = \frac{\sin B}{b}$$

$$\frac{\sin 145}{24} = \frac{\sin B}{17}$$

$$\frac{17 \sin 145}{24} = \frac{24 \sin B}{24}$$

$$\sin B = 0.4063$$

$$B = 23.97$$

$B = 24^0$

Show formula and work to find the total value of the investment after the time given.

3) $28,000 at 14% compounded quarterly for 5 years

$\frac{0.14}{4}$ $n = 5 \times 4$

$n = 20$

$= 0.035$

$A = P(1+i)^n$

$A = 28{,}000(1+0.035)^{20}$

$A = \$55{,}714.08$

Show formula and work to find the total value of the investment after the time given.

6) $30,000 at 13% compounded annually for 10 years

$$A = 30{,}000(1+0.13)^{10}$$

Show formula and work to find the total value of the investment after the time given.

7) $43,700 at 4% compounded daily for 4 years

$\frac{0.04}{365}$

$365 \times 4 = 1460$

$A = P(1+i)^n$

$A = 43700(1+0.00010958)$

$A = 51,287.60$

Show formula and work to find the total value of the investment after the time given.

8) $90 at 10% compounded quarterly for 2 years

$\frac{0.10}{4} = 0.025$

$A = P(1+i)^n$ $\quad n = 2 \times 4 = 8$

$A = \$90(1+0.025)^8$

$A = \$109.66$

Show formula and work to find the total value of the investment after the time given.

9) $25,000 at 5% compounded semiannually for 2 years

$\frac{.05}{2} = .025$

$2 \times 2 = 4$

$A = P(1+i)^n$

$= 25{,}000(1+0.025)^4$

$25000(1.025)^4$

$25000(1.1038)$

$\$27{,}595.32$

Show formula and work to find the total value of the investment after the time given.

$\frac{0.11}{4} = 0.0275$

$2 \times 4 = 8$

10) $29,200 at 11% compounded quarterly for 2 years

$A = P(1+i)^n$

$29,200(1+.0275)^8$

$= 36,277.50$

Show formula and work to find the total value of the investment after the time given.

$\frac{0.16}{4} = 0.04$

12) $330 at 16% compounded quarterly for 1 year

$A = P(1+i)^n$

$A = \$330(1+0.04)^4$

$A = \$386.05$

Show formula and work to find the total value of the investment after the time given.

14) $290 at 14% compounded annually for 2 years

$A = P(1+i)^n$

$A = 240($

Show formula and work to find the total value of the investment after the time given.

13) $240 at 1% compounded quarterly for 4 years

$$A = P(1+i)^n$$

$$A = 240(1+0.0025)^{16}$$

$$A \rightarrow \$249.78$$

$$\frac{0.04}{4} = 0.0025$$

Show formula and work to find the total value of the investment after the time given.

15) $27,000 at 16% compounded semiannually for 4 years

$A = P(1 + i)^n$

$i = \frac{0.16}{2} = 0.08$

$n = 4 \times 2 = 8$

$A = 27000(1.08)^8$

$A = 27000(1.851)$

$A = \$49975.12$

Present Value

You want to invest enough money to have $32,000 for tuition in 2 yrs.

If you inuest your money at 6%, compounded monthly, how much do you need to invest now?

i = 6% ÷ 12 times a year

.06 ÷ 12 = .005

- n = # of years x times a year

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2. d) $5000 in 4 years at 6%
annually

$$PV = A(1+i)^{-n}$$

$$= 5000(1+0.06)^{-4}$$

$$= 5000(1.06)^{-4}$$

$$= \$3960.47$$

$0.06 \div 1$

$= 0.06$

4×1

$= 4$

$PV = A(1+i)^{-n}$

$\frac{0.04}{2} = 0.02$

$P2000(1+0.02)^{-4}$

$P = 1847.69$

finish 2cd

3abcd

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40

$$PV = A(1+i)^{-n}$$

$$= 3200(1+0.005)^{-24}$$

$$= 3200(1.005)^{-24}$$

PV $2838.99

∴ you need to invest $2838.99 in the bank