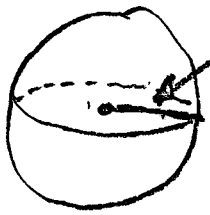
Geometry 4-18-13 Class Notes

(6.)  5.3in S.A. = ?

112.36π in^2

352.99 in^2

$S.A. = 4\pi r^2 = 4\pi(5.3)^2 =$

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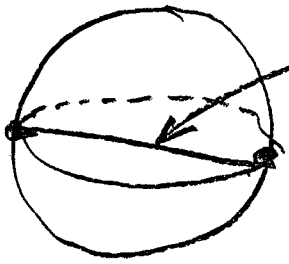
(8)  8cm S.A. = ?

201.06 cm^2

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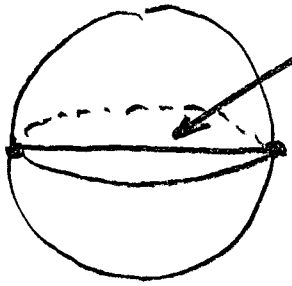
(14)  7.4cm V = ?

67.54π cm^3 EXACT

212.18 cm^3 APPROX

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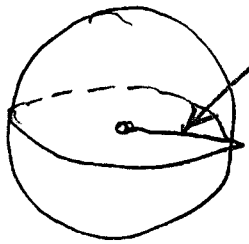
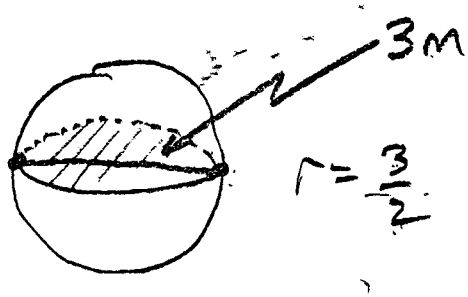
(17)  9.3m V = ?

1072.48π m^3

3369.30 m^3

(5)



S.A. = ?

$$S.A. = 4\pi r^2 = 4(\pi)\left(\tfrac{3}{2}\right)^2 = 4\pi\tfrac{9}{4}$$

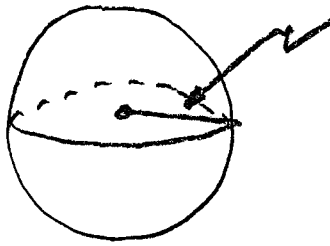
$= \boxed{9\pi\ m^2}$ EXACT

$= 9(3.1416)$

$= 28.274$

$= \boxed{28.27\ m^2}$ Approx

(7.)



S.A. = ?

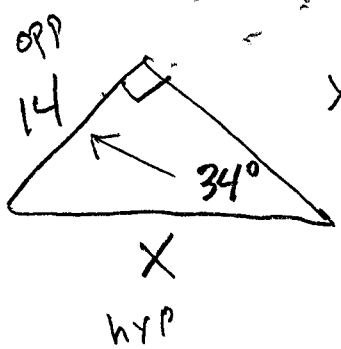
$$S.A. = 4\pi r^2 = 4\pi(6.3)^2$$

$= 4\pi(39.69) = \boxed{158.76\pi\ ft^2}$ EXACT

≈ 498.760

$= \boxed{498.76\ ft^2}$ Approx.

(32)



$X \sin 34^\circ = \frac{14}{X} \cdot X$

$\frac{X \sin 34}{\sin 34} = \frac{14}{\sin 34}$

$X = \frac{14}{(.5592)}$

$X = 25.036$

$X = 25.0$

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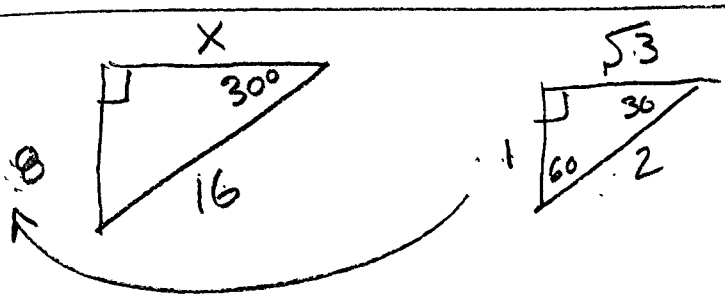
(40)



$X = 8\sqrt{3} \approx 13.856$

$X = 13.9$

(28)

$X \cdot \cos 56° = \frac{14}{X} \cdot X$

$\frac{X \cos 56°}{\cos 56°} = \frac{14}{\cos 56°}$

$X = \frac{14}{(.5592)}$

$X = 25.036$

$\boxed{X = 25.0}$

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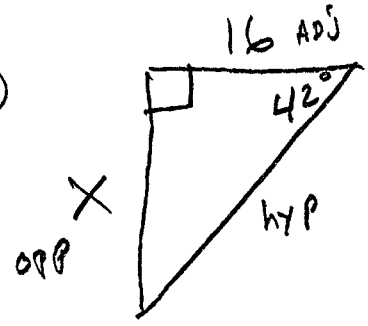
(29)



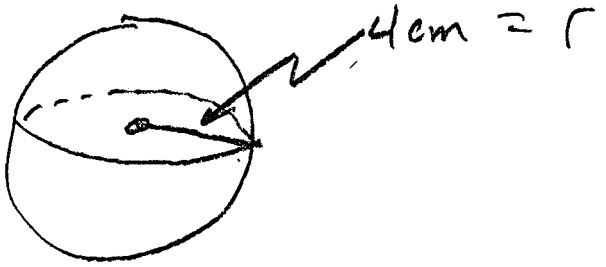
$16 \tan 42° = \frac{X}{16} \cdot 16$

$16(.9004) = X$

$14.406 = X$

$\boxed{14.4 = X}$

(16) $V = ?$



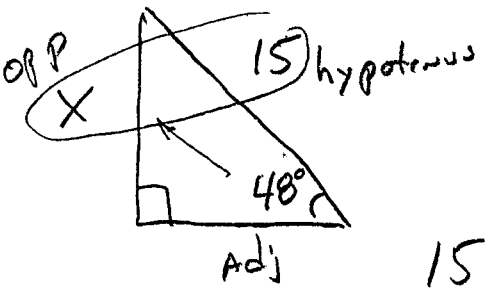
$$V = \frac{4}{3}\pi r^3 = \frac{4}{3}\pi(4)^3 = \frac{4}{3}\pi 64$$

$$V = \boxed{\frac{256}{3}\pi \text{ cm}^3}$$

$$V \approx \frac{256}{3} \cdot (3.1416)$$

$$V \approx 268.083 \approx \boxed{268.08 \text{cm}^3}$$

(58)



$SIN = \frac{O}{H}$

$15 \sin 48^\circ = \frac{X}{15} \cdot 15$

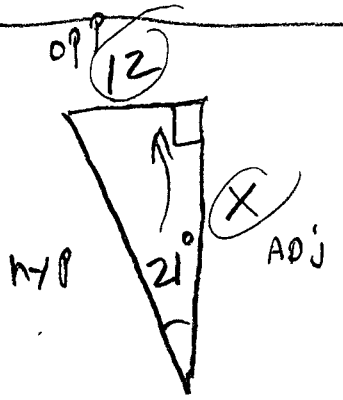
$15(.7431) = X$

$11.1465 = X$

$11.15 = X$ hund.

11.1

(66)



$X \tan 21^\circ = \frac{12}{X} \cdot X$

$\frac{X \tan 21}{\tan 21} = \frac{12}{\tan 21}$

$X = \frac{12}{.3839} = 31.258 =$ 31.3

S.A. ⇒ hundredths SOHCAHTOA ⇒ tenths.
V

S.A. ⇒ $4\pi r^2$

V ⇒ $\frac{4}{3}\pi r^3$

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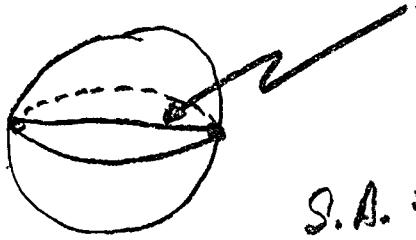
(2)



S.A.

$S.A. = 4\pi r^2 = 4\pi (3.8)^2$

$57.76\pi \text{ yd}^2$

$= 181.458$

$\approx \boxed{181.46 \text{ yd}^2}$ Approx

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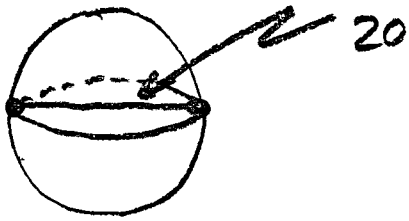
(18)



$V = ?$

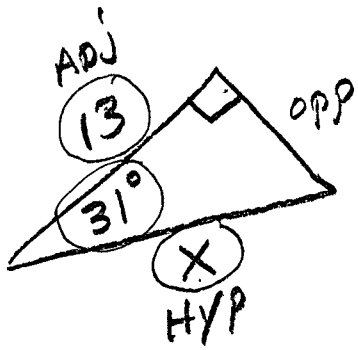
$V = \frac{4}{3}\pi (10.3)^3 = (1092.727)\frac{4}{3}\pi$

$= \boxed{1456.969\pi \text{ yd}^3}$

≈ 4577.215

$\approx \boxed{4577.22 \text{ yd}^3}$

(47)



$$X\cos 31^\circ = \frac{13}{X}\cdot X$$

$$\frac{X\cos 31^\circ}{\cos 31^\circ} = \frac{13}{\cos 31^\circ}$$

$$X = \frac{13}{(.8572)}$$

$$X = 15.166$$

$$\boxed{X = 15.2}$$

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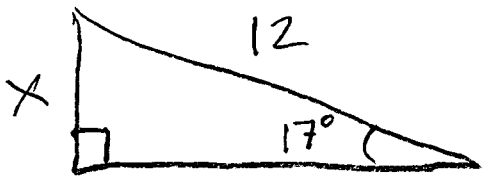
(49)



$$12\sin 17^\circ = \frac{X}{12}\cdot 12$$

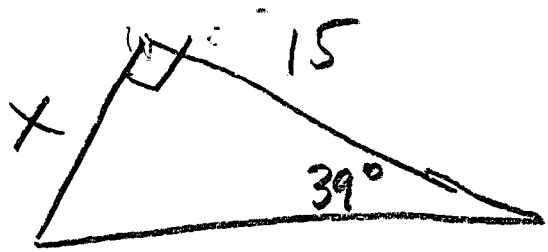
$$12\sin 17 = X$$

$$12(.2924) = X$$

$$3.508 = X$$

$$\boxed{3.5 = X}$$

(64)



$$15 \cdot \tan 39^\circ = \frac{x}{15} \cdot 15$$

$$15 \tan 39 = x$$

$$15(.8098) = x$$

$$12.147 = x$$

$$\boxed{12.1 = x}$$