

**Day 50 Warm Up**  
**Trig Day 1 SOHCAHTOA**

1.	$\sqrt{8}$	4	$\sqrt{4 \cdot 2} = 2\sqrt{2}$
2.	$\sqrt{12}$	$2\sqrt{3}$	$6\sqrt{2}$
3.	$\sqrt{125}$	$3\sqrt{5}$	$5\sqrt{5}$
4.	$\log_7 7$	0	1
5.	$\sqrt{144}$	12	72
6.	Area of Triangle	$bh$	$\frac{1}{2}bh$
7.	$\frac{32}{40}$	$\frac{4}{5}$	$\frac{5}{4}$
8.	$\log_e e^7 =$	$\ln 10$	7
9.	$5\sqrt{20} =$	$10\sqrt{2}$	$10\sqrt{5}$
10.	$\sqrt{11}$	$11^2$	$11^{\frac{1}{2}}$



# Why Didn't Krok Like to Go Sailing With the Baseball Uniform Designer?



Simplify each expression below and find your answer in the corresponding answer column. Write the letter of the exercise in the box that contains the number of the answer.

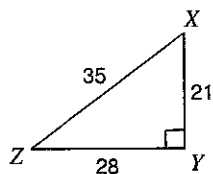
(L) $\sqrt{8} = \sqrt{4 \cdot 2} = 2\sqrt{2}$	(18) $7\sqrt{2}$	(S) $5\sqrt{18}$	(19) $6\sqrt{7}$
(I) $\sqrt{45}$	(14) $5\sqrt{5}$	(U) $3\sqrt{28}$	(13) $24\sqrt{3}$
(A) $\sqrt{50}$	(12) $2\sqrt{2}$	(A) $2\sqrt{1000}$	(3) $24\sqrt{2}$
(T) $\sqrt{12}$	(4) $5\sqrt{2}$	(P) $\sqrt{1,000,000}$	(9) $15\sqrt{2}$
(O) $\sqrt{98}$	(28) $4\sqrt{3}$	(E) $3\sqrt{128}$	(5) $16\sqrt{5}$
(S) $\sqrt{48}$	(20) $2\sqrt{3}$	(K) $8\sqrt{27}$	(23) 1000
(E) $\sqrt{125}$	(25) $3\sqrt{5}$	(L) $4\sqrt{80}$	(16) $20\sqrt{10}$
(A) $\sqrt{20}$	(8) $3\sqrt{7}$	(H) $-3\sqrt{54}$	(10) $-8\sqrt{6}$
(S) $\sqrt{72}$	(1) $6\sqrt{2}$	(A) $-7\sqrt{40}$	(21) $30\sqrt{3}$
(Y) $\sqrt{63}$	(7) $10\sqrt{2}$	(B) $-8\sqrt{121}$	(11) $-14\sqrt{10}$
(E) $\sqrt{144}$	(6) $4\sqrt{2}$	(S) $2\sqrt{500}$	(24) $20\sqrt{5}$
(W) $\sqrt{32}$	(22) $2\sqrt{5}$	(T) $-4\sqrt{24}$	(26) $15\sqrt{7}$
(D) $\sqrt{75}$	(27) 12	(Z) $3\sqrt{175}$	(2) $-9\sqrt{6}$
(A) $\sqrt{200}$	(15) $5\sqrt{3}$	(C) $5\sqrt{108}$	(17) -88

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
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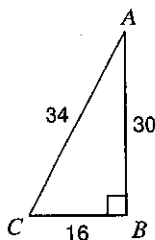
# Trigonometric Ratios

Find the value of each trigonometric ratio.

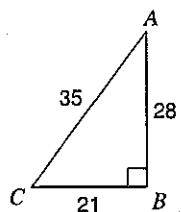
1)  $\tan Z$



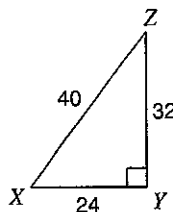
2)  $\cos C$



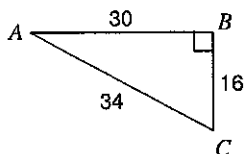
3)  $\sin C$



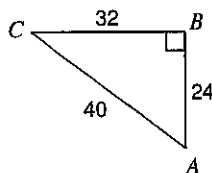
4)  $\tan X$



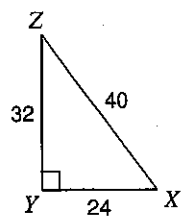
5)  $\cos A$



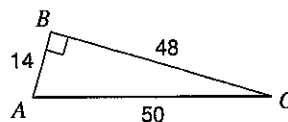
6)  $\sin A$



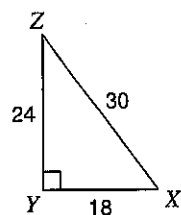
7)  $\sin Z$



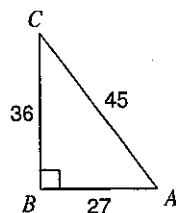
8)  $\sin C$



9)  $\cos Z$

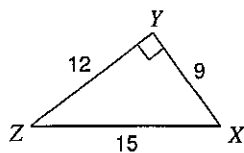


10)  $\tan C$

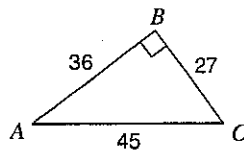


Find the value of each trigonometric ratio to the nearest ten-thousandth.

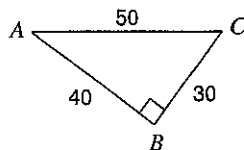
11)  $\cos Z$



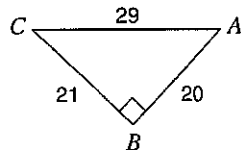
12)  $\cos C$



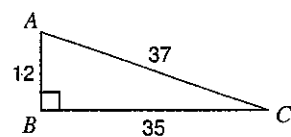
13)  $\tan C$



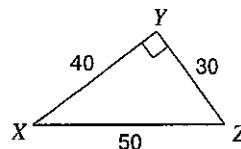
14)  $\tan A$



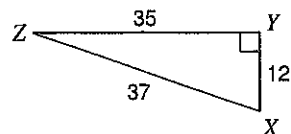
15)  $\tan C$



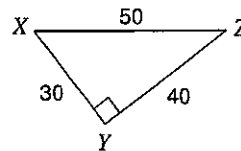
16)  $\tan X$



17)  $\sin Z$



18)  $\sin Z$



19)  $\sin 48^\circ$

20)  $\sin 38^\circ$

21)  $\cos 61^\circ$

22)  $\cos 51^\circ$

**Critical thinking questions:**

23) Can the sine of an angle ever equal 2?  
Why or why not?

24)  $\sin x = \frac{1}{3}$   
Find  $\cos x$ .