Section 2-1

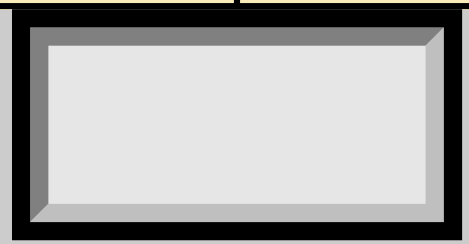
Method of Scoring. If you answer a question correctly, the dollar value of that question is added to your total. If you miss a question, the dollar value is *subtracted* from your total. So think carefully before you answer!

Instructions. Solve the problems in any order you wish. If your total at the end is more than $1500, you will be declared **Trigonometerrific**!

Important: Acrobat Reader 4.0 or later required.

To Begin: Press Page Down to go to the next page.

Pythagoras	Specials	Calculator	Trig Defs
100	100	100	100
200	200	200	200
300	300	300	300



Pythagoras

For $100: In the right triangle $\triangle ABC$, find the length c.

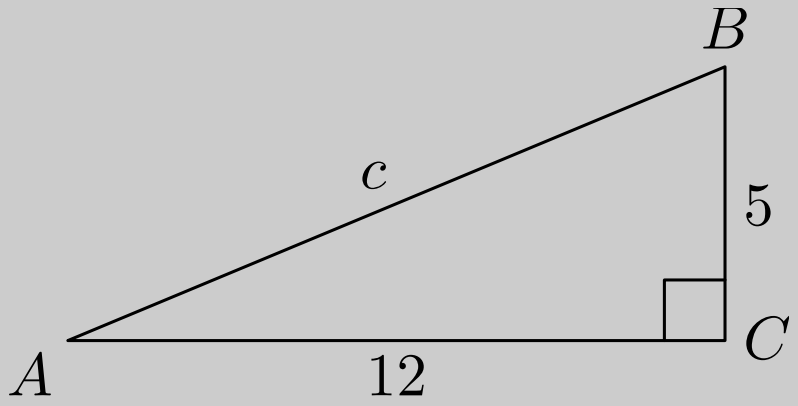
(a) 11

(b) 13

(c) 15

(d) $4\sqrt{3}$

(e) $3\sqrt{4}$



Pythagoras

For $200: In the right triangle $\triangle ABC$, find the length of side a.

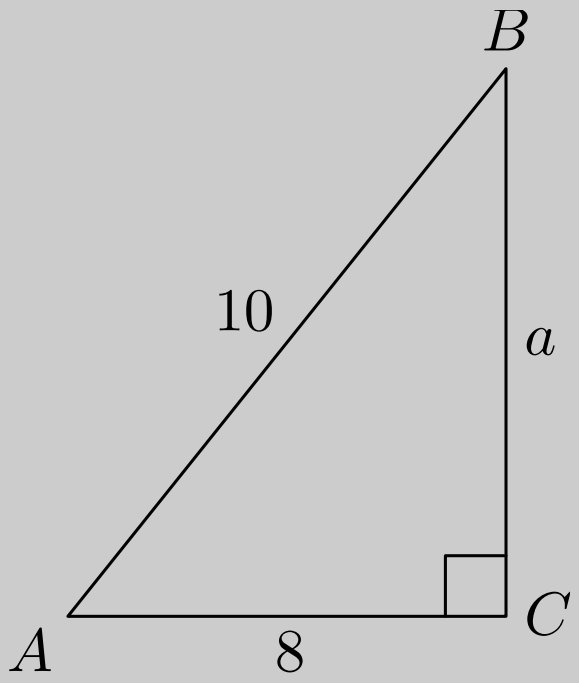
(a) 5

(b) 6

(c) 7

(d) $2\sqrt{2}$

(e) $4\sqrt{5}$



Pythagoras

For $300: In the figure on the right, find the length of side CD.

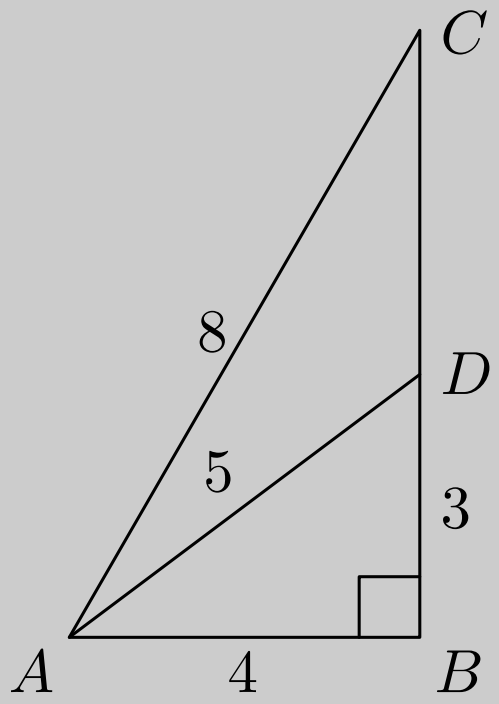
(a) $2 + \sqrt{2}$

(b) $\sqrt{3} - 1$

(c) $4\sqrt{3} - 3$

(d) $1 + 3\sqrt{2}$

(e) $4 + 2\sqrt{3}$



Specials

For $100: In the right triangle $\triangle ABC$, what is the length of side BC?

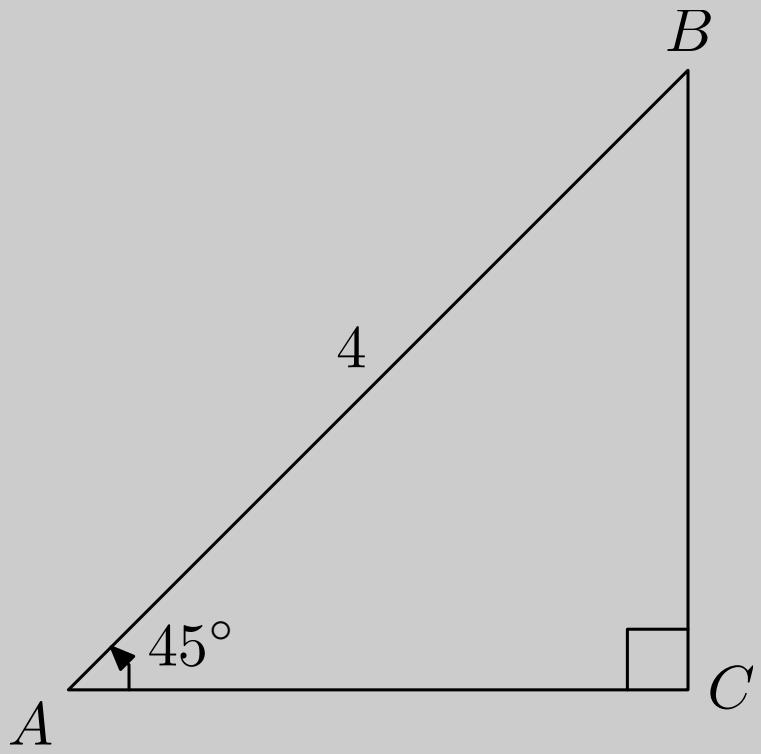
(a) 2

(b) 4

(c) $\sqrt{2}$

(d) $2\sqrt{2}$

(e) $4\sqrt{2}$



Specials

For $200: In the right triangle $\triangle ABC$, what is the length of side BC?

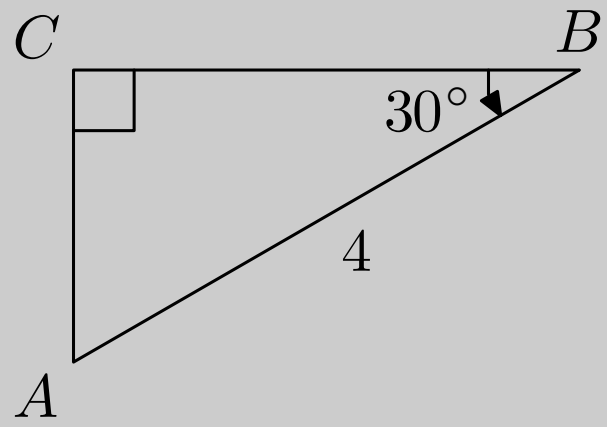
(a) 3

(b) 2

(c) $4\sqrt{3}$

(d) $3\sqrt{2}$

(e) $2\sqrt{3}$



Specials

For $300: In the figure at the right, what is the length of side AB? Note that the length of $AD = 8\sqrt{2}$.

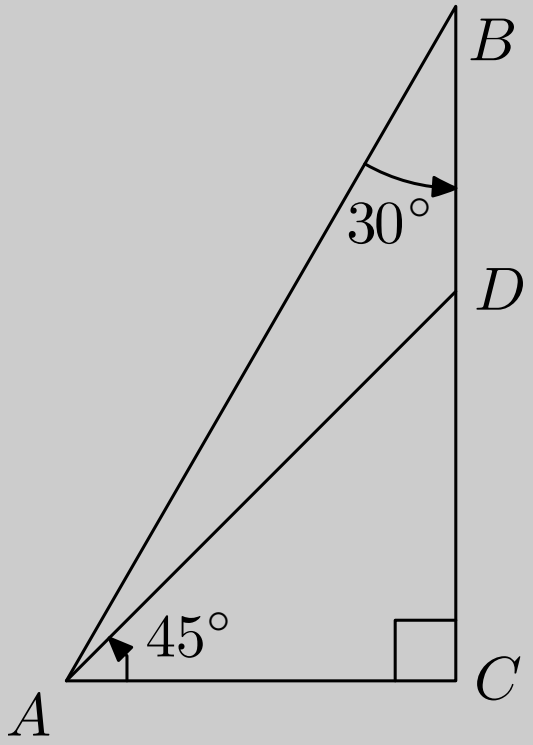
(a) 4

(b) $8\sqrt{2}$

(c) $8\sqrt{3}$

(d) 16

(e) 32



Calculator

For $100: Use your calculator to find $\cot 37°$.

(a) 1.0124

(b) 1.2444

(c) 1.3270

(d) 4.7171×10^{-4}

(e) $3.2441 \times 10^{-}4$

Calculator

For $200: Use your calculator to find $\sec 73.2°$.

(a) 3.4598

(b) 2.8996

(c) 1.9949

(d) 0.9999

(e) 0.8744

Calculator

For $300: Use your calculator to find $1 - 2\csc^2 33^\circ$.

(a) 0.8868

(b) 2.9943

(c) 3.8764

(d) -4.8332

(e) -5.7424

Trig Defs

For $100: In the right triangle $\triangle ABC$, find the length of c.

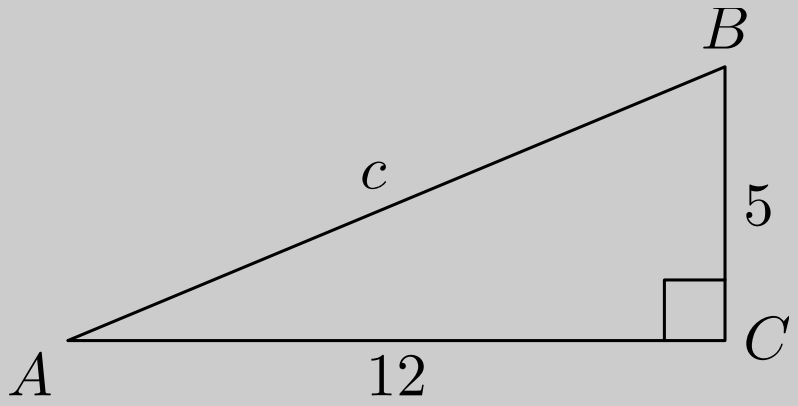
(a) 11

(b) 13

(c) 15

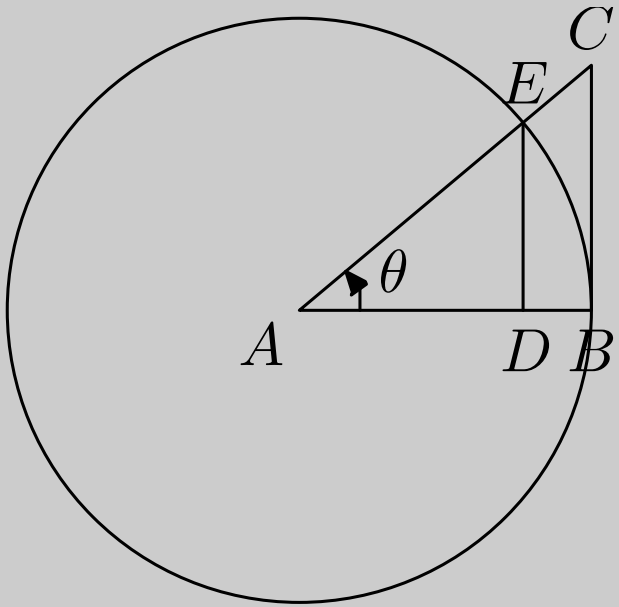
(d) $4\sqrt{3}$

(e) $3\sqrt{4}$



Trig Defs

For $200: The circle centered at A in has radius 1. Find BC in terms of θ.



(a) $\cos\theta$

(b) $\sin\theta$

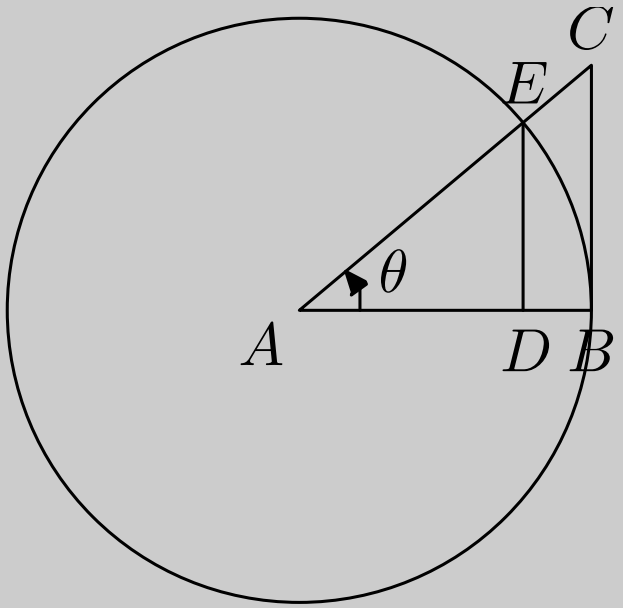
(c) $\tan\theta$

(d) $\sec\theta$

(e) $\csc\theta$

Trig Defs

For $300: The circle centered at A has radius 1. Find ED in terms of θ.



(a) $\cos\theta$

(b) $\sin\theta$

(c) $\tan\theta$

(d) $\sec\theta$

(e) $\csc\theta$