ALG 2 BELLWORK WED. Jan 7, 2015

11. $(\sqrt{2}-6)(\sqrt{2}-4) = ?$

A. $10\sqrt{2-22}$
B. $12\sqrt{2+24}$
C. $24-\sqrt{2}$
D. $26-10\sqrt{2}$
E. $10-11\sqrt{2}$

13. If x is an odd integer greater than 5, what is the next greater odd integer in terms of x?

A. $x+2$
B. $x+3$
C. $x+5$
D. $3x$
E. x^2

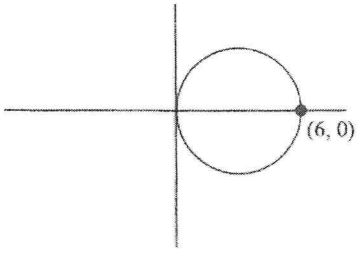
15. Anne is 3 times as old as Kyle. If their combined age is 24, how old is Anne?

A. 24
B. 18
C. 12
D. 9
E. 6

29. Which of the following is the slope-intercept form of a line that is perpendicular to $y=-\frac{1}{4}x+1$ in the standard (x,y) coordinate plane and that also contains the point $(0,-5)$?

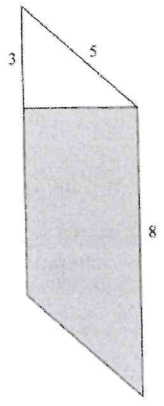
A. $y=4x-5$
B. $y=-\frac{1}{4}x$
C. $y=4x+5$
D. $y=-\frac{1}{4}x-5$
E. $y=-5x+4$

32. Which of the following is an equation of the circle shown below?



F. $(x-3)^2+y^2=9$
G. $(x-6)^2+(y-3)^2=9$
H. $x^2-(y-6)^2=3$
J. $x^2+(y+3)^2=9$
K. $(x-3)^2+(y-3)^2=9$

35. Given the parallelogram below, what is the area of the shaded region?



A. 24
B. 26
C. 32
D. 38
E. 40

ANSWERS

11. $(\sqrt{2}-6)(\sqrt{2}-4) = ?$

A. $10\sqrt{2}-22$
B. $12\sqrt{2}+24$
C. $24-\sqrt{2}$
D. $26-10\sqrt{2}$
E. $10-11\sqrt{2}$

	$\sqrt{2}$	-6
$\sqrt{2}$	2	$-6\sqrt{2}$
-4	$-4\sqrt{2}$	24

$= 26-10\sqrt{2}$

13. If x is an odd integer greater than 5, what is the next greater odd integer in terms of x?

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15. Anne is 3 times as old as Kyle. If their combined age is 24, how old is Anne?

A. 24
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E. 6

$A = 3K$

$A+K=24$

$3K+K=24$

$4K=24$

$K=6$

$A=3(6)=18$

29. Which of the following is the slope-intercept form of a line that is perpendicular to $y=-\frac{1}{4}x+1$ in the standard (x, y) coordinate plane and that also contains the point $(0, -5)$?

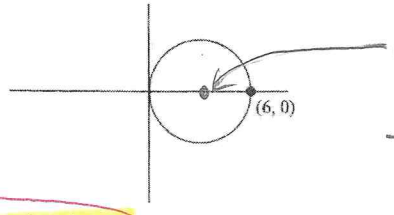
A. $y=4x-5$
B. $y=-\frac{1}{4}x$
C. $y=4x+5$
D. $y=-\frac{1}{4}x-5$
E. $y=-5x+4$

$m=4$

THIS IS y-INT

$b=-5$

32. Which of the following is an equation of the circle shown below?



center $(3,0)$

radius $=3$

F. $(x-3)^2+y^2=9$
G. $(x-6)^2+(y-3)^2=9$
H. $x^2-(y-6)^2=3$
J. $x^2+(y+3)^2=9$
K. $(x-3)^2+(y-3)^2=9$

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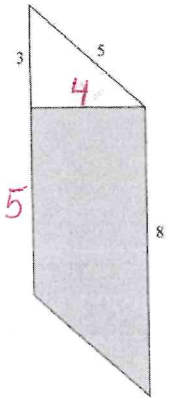

A. 24
B. 26
C. 32
D. 38
E. 40

Trapezoid

$A=\frac{1}{2}(b_1+b_2)h$

$=\frac{1}{2}(8+5)4$

$=26$