

Due: Tue, Jan 31, 2017 06:30 PM EST

Question

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Description

Created by J. Skufca on 1 Sep 2015 as a possible ABC II test version

1. Question Details

ABC TangLine V1 slope-int form mod1 [2644848]

Find the equation for the line tangent to the curve $y = 2 + x^2$ at $x = 1$. Give your answer in *slope-intercept* form.**2.** Question Details

ABC trig_inverse arctan [2639320]

Find the exact value of:

(a) $\arctan(-\sqrt{3})$

(Enter your answer in radians.)

3. Question Details

ABC SPECIAL Q3 V1 [2678914]

Solve for b :

$$-1 + \frac{1}{b} = 1.$$

$b =$

4. Question Details

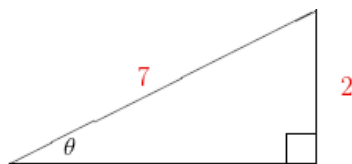
ABC complete_square V1 [2599922]

Rewrite by completing the square:

$z^2 + 8z + 18 =$

5. Question Details

ABC SPECIAL Q5 V1 [2679070]



$\cos(\theta) =$

6. Question Details

ABC SPECIAL Q6 V1 [2679080]

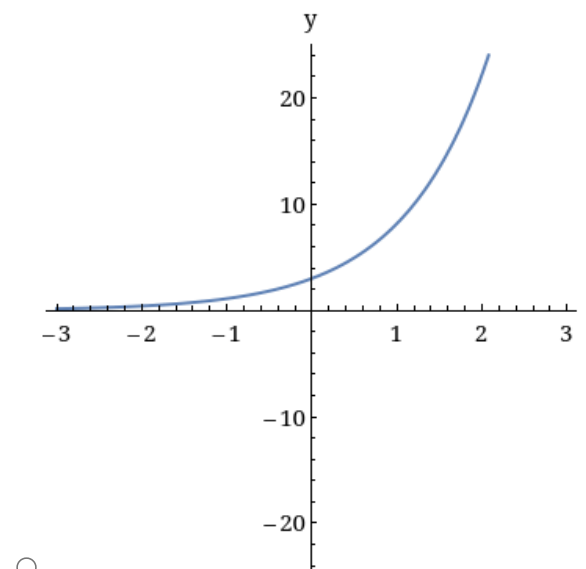
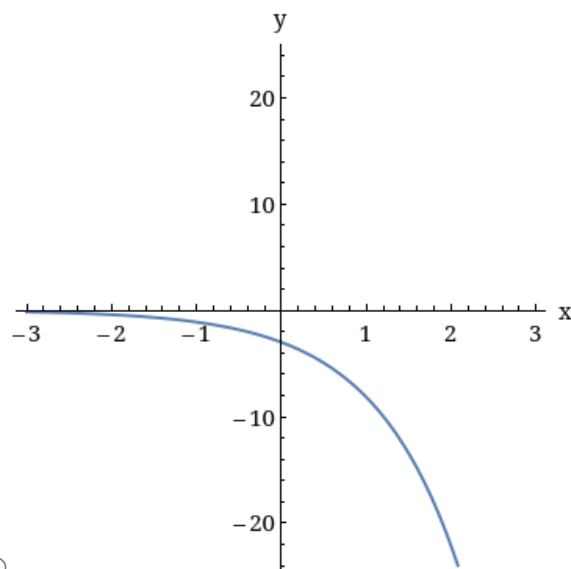
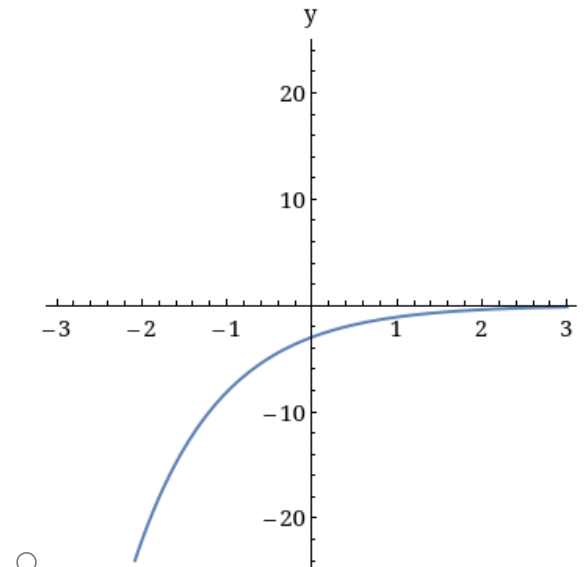
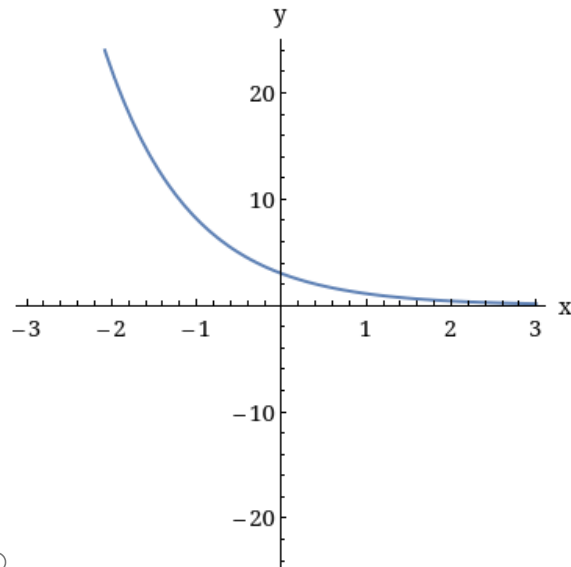
Solve for u :

$$6e^{4u} = 3.$$

 $u =$

7. Question Details

ABC SPECIAL Q7 [2679086]

Which graph shows the function $y=f(x) = 3e^x$ 

8. Question Details

ABC SPECIAL Q8 V1 [2679131]

Solve for r :

$$3r^{1/2} = 8.$$

$$r = \text{[input box]}$$

9. Question Details

ABC SPECIAL Q9 V1 [2679364]

If $f(t) = -2t^4 + 5t^2 - 6t + 8$,
then find the derivative

$$f'(t) = \text{[input box]}$$

10. Question Details

ABC SPECIAL Q10 V1 [2679369]

If $f(t) = 4\ln(t)$,
then find the derivative

$$f'(t) = \text{[input box]}$$

11. Question Details

ABC SPECIAL Q11 V1 [2679393]

If $y = \sqrt{x+2}$,
then find the derivative

$$\frac{dy}{dx} = \text{[input box]}$$

12. Question Details

ABC SPECIAL Q12 V1 [2679396]

If $y = \ln(5-x)$,
then find the derivative

$$\frac{dy}{dx} = \text{[input box]}$$

13. Question Details

ABC SPECIAL Q13 V1 [2679452]

Find the derivative of $f(x) = (3x^2 - 4)\tan(x)$.

$$f'(x) = \text{[input box]}$$

14. Question Details

ABC SPECIAL Q14 V2 [2679528]

Find the derivative of $f(x) = \frac{e^x + 3}{x}$.

$$f'(x) = \text{[input box]}$$

15. Question Details

ABC SPECIAL Q15 V1 [2679540]

Find the derivative of $f(x) = \frac{x^2}{\sin(x)}$.

$$f'(x) = \boxed{}$$

16. Question Details

ABC aderiv 2.0 V3 (sin) [2679554]

Find a function $f(x)$ whose derivative is:

$$f'(x) = \sin(x) + 3e^x.$$

$$f(x) = \boxed{} + C.$$

17. Question Details

ABC SPECIAL Q17 V1 [2680279]

Evaluate the indefinite integral:

$$\int \sin\left(\frac{x}{5}\right) dx = \boxed{} + C.$$

18. Question Details

ABC SPECIAL Q18 V1 [2680290]

Evaluate the indefinite integral:

$$\int x e^{-2x^2} dx = \boxed{} + C.$$

19. Question Details

ABC SPECIAL Q19 V1 [2680298]

Evaluate the definite integral:

$$\int_1^2 (2t+2) dt = \boxed{}.$$

20. Question Details

ABC SPECIAL Q20 V1 [2680315]

Evaluate the definite integral:

$$\int_0^3 \frac{1}{e^{2x}} dx = \boxed{}.$$

Assignment Details