



Tools

Question 1

1 out of 1 points



1. The domain of the function  $f(x) = \frac{x^2 + x - 2}{\sqrt{x - 5}}$  is

- a)  $\mathbb{R} - \{-2, 1\}$
- b)  $\mathbb{R} - \{-2, 1, 5\}$
- c)  $(5, \infty)$
- d)  $[5, \infty)$

Selected Answer:  (c)

- Answers:
- (a)
  - (b)
  - (c)
  - (d)

Question 2

1 out of 1 points





Question 2

1 out of 1 points



2. The range of the function  $f(x) = \frac{|x|}{x}$  is

- a)  $\mathbb{R} - \{0\}$
- b)  $\mathbb{R} - \{1, -1\}$
- c)  $[-1, 1]$
- d)  $\{1, -1\}$

Selected Answer:  (d)

- Answers
- (a)
  - (b)
  - (c)
  - (d)

Question 3

1 out of 1 points

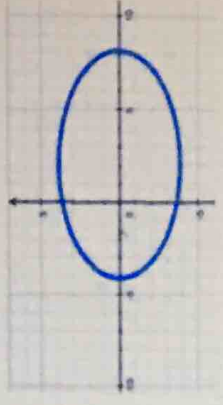
Question 3



1 out of 1 points

3. The following function represents a graph of a function

$$4x^2 - 3y^2 + 10y^2 = 130$$



- a) True
- b) False

Selected Answer: (b)  
Answers: (a) (b) (c) (d)

(c) (d)



Question 4



1 out of 1 points

5. The graph of the function  $f(x) = 3 + |x - 8|$  is obtained by shifting the graph  $f(x) = |x|$

- a) 3 units upward and 8 units to the left
- b) 3 units upward and 8 units to the right
- c) 3 units downward and 8 units to the left
- d) 3 units downward and 8 units to the right

Selected Answer:  (b)  
Answers:  (a)  (b)  (c)  (d)



Question 5

1 out of 1 points



6. The function  $f(x) = x^3 + \sin x$  is

- a) an even function
- b) an odd function
- c) neither even nor odd function
- d) an odd and even function

Selected Answer:  (b)

- Answers:
- (a)
  - (b)
  - (c)
  - (d)

Question 6

1 out of 1 points

Question 6

1 out of 1 points



7. If  $f(x) = \sqrt{x + 5}$ ,  $g(x) = \frac{2x+5}{x+3}$ . Then the domain of  $(f \cdot g)(x)$  is

- a)  $(-5, \infty)$
- b)  $[-5, \infty)$
- c)  $(-5, \infty) - \{-3\}$
- d)  $[-5, \infty) - \{-3\}$

Selected Answer:  (d)  
 Answers:  (a)  (b)  (c)  (d)

Question 7

1 out of 1 points

Question 7

1 out of 1 points



8. If  $f(x) = \frac{1}{x^{-1}}$ ,  $g(x) = \cot x$ , then  $(f \circ g)(x) =$

a)  $x \cdot \tan x$

b)  $\tan x$

c)  $\cot \frac{1}{x}$

d)  $\frac{1}{x} \cot x$

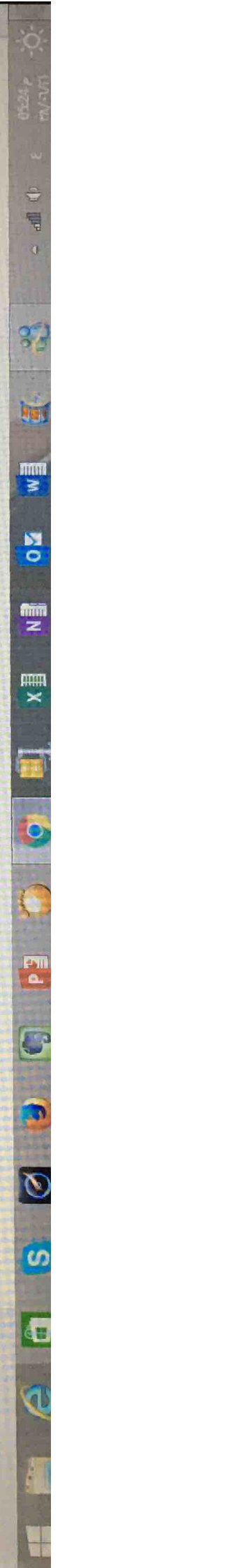
Selected Answer:  (b)

Answers:  (a)

(b)

(c)

(d)



Question 8



1 out of 1 points

9. If the graph of the function  $f(x) = |x|$  is shifted 4 units upwards, then the range of the

new function is

- a)  $[4, \infty)$
- b)  $(4, \infty)$
- c)  $(0, \infty)$
- d)  $[0, \infty)$

Selected Answer:  (a)

Answers:  (a)

(b)

(c)

(d)



Question 9



1 out of 1 points

10. The domain of the function  $f(x) = \frac{1}{\sqrt{x^2 - 25}}$  is

- a)  $(-\infty, -5] \cup [5, \infty)$
- b)  $(-\infty, -5) \cup (5, \infty)$
- c)  $(-5, 5)$
- d)  $[-5, 5]$

Selected Answer:  (b)

Answers:  (a)

(b)

(c)

(d)

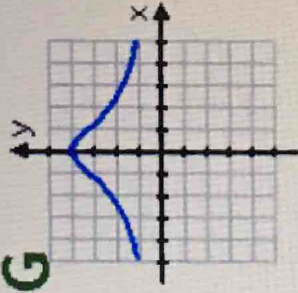
Question 10

Question 10

0 out of 1 points



11. The range of the function  $f(x)$  whose graph  $G$  is given is **G**



- a)  $(0, 4)$
- b)  $(-\infty, 4)$
- c)  $(0, 4]$
- d)  $(4, \infty)$

Selected Answer:  (b)

Answers:  (a)  (b)  (c)  (d)

Question 11

1 out of 1 points



Question 11



1 out of 1 points

$$12. 150^\circ = \dots rad$$

- a)  $\frac{\pi}{6}$
- b)  $5\pi$
- c)  $\frac{5\pi}{6}$
- d)  $6\pi$

Selected Answer:  (c)

- Answers:
- (a)
  - (b)
  - (c)
  - (d)

Question 12



1 out of 1 points

13. If  $\sin \theta = \frac{-1}{5}$  and  $\cos \theta = \frac{2}{5}$ , then  $\sin 2\theta =$

a)  $\frac{-4}{25}$

b)  $\frac{-2}{25}$

c)  $\frac{-4}{5}$

d)  $\frac{-2}{5}$

Selected Answer  (a)

Answers  (a)

(b)

(c)

(d)

Question 13

1 out of 1 points

14. The following function is rational function

a)  $\frac{1-\sec x}{3+\sin x}$

b)  $\frac{3}{\sqrt{x-1}}$

c)  $\frac{1+e^x}{1-e^x}$

d)  $\frac{3+x}{x^2-x+1}$

Selected Answer:  (d)

Answers:  (a)

(b)

(c)

(d)

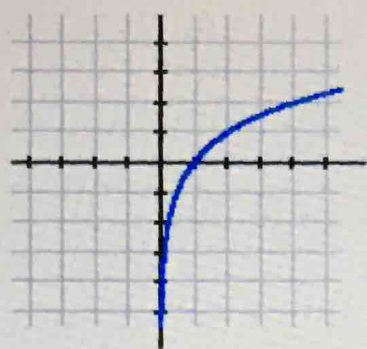


Question 14

1 out of 1 points

The following graph represents the graph of the function  $f(x) =$

- a)  $2^x$
- b)  $-2^x$
- c)  $\left(\frac{1}{2}\right)^x$
- d)  $-\left(\frac{1}{2}\right)^x$



Selected Answer:  (b)

Answers:  (a)  (b)  (c)  (d)

Question 15

1 out of 1 points



The range of the function  $f(x) = \ln x$  is

- a)  $(0, \infty)$
- b)  $(-\infty, \infty)$
- c)  $[0, \infty)$
- d)  $(-\infty, 0)$

Selected Answer:  (b)

Answers:  (a)  (b)  (c)  (d)

Monday, March 30, 2014 7:30:49 PM AEST

