

Math 1111 Final Exam Spring 2000 Key

1.

$$\frac{1}{x^4y^2}$$

2.

$$x^3$$

3.

$$\frac{x^2 + 6x - 15}{(x - 3)x}$$

4.

$$\frac{\sqrt{7} - 1}{6}$$

5.

$$5a^2b$$

6.

$$x = 6$$

7.

\$8.32 per hour

8.

$$x = \frac{1}{2} - \frac{1}{2}i\sqrt{3} \text{ or } x = \frac{1}{2} + \frac{1}{2}i\sqrt{3}$$

9.

$$x = 7$$

10.

$$\{x : x \leq -6\}$$

11.

$$\{x : -17 < x < 3\}$$

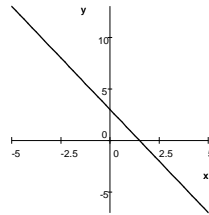
12.

$$\{x : -3 < x < 3\}$$

13.

$$10$$

14.



15.

$$-\frac{1}{2}$$

16.

$$y = 2x + 6$$

17.

$$2$$

18.

$$9.6$$

19.

$$\{x : x \neq 8\}$$

20.

$$29$$

21.

$$f^{-1}(x) = \frac{x+1}{2}$$

22.

maximum value is 69

23.

$$x^3 - x^2 + 3x - 1$$

24.

$$11 + 2i$$

25.

$$\$1882.0$$

26.

$$w = 9^4$$

27.

$$\ln x + 2 \ln y - \ln z$$

28.

$$x = \frac{\ln 10}{\ln 3} \approx 2.096$$

29.

$$x = 3, y = -2$$

30.

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