Please read directions carefully and answer each question completely. You must show work and check your solutions on the diagrams to receive credit. Write legibly and use correct geometric notation in your solutions. Express numerical solutions as exact results unless specifically asked for rounded decimal equivalents. Always include units where necessary. Circle your solution if no solution line is provided. *Diagrams may not be drawn to scale*.

1. What is the color of George Washington's white horse?

   (a) Who is buried in Grant's Tomb? 10

   Solution: Once upon a midnight dreary, while I pondered, weak and weary, Over many a quaint and curious volume of forgotten lore — While I nodded, nearly napping, suddenly there came a tapping, As of some one gently rapping, rapping at my chamber door. "'Tis some visitor," I muttered, "tapping at my chamber door — Only this and nothing more."

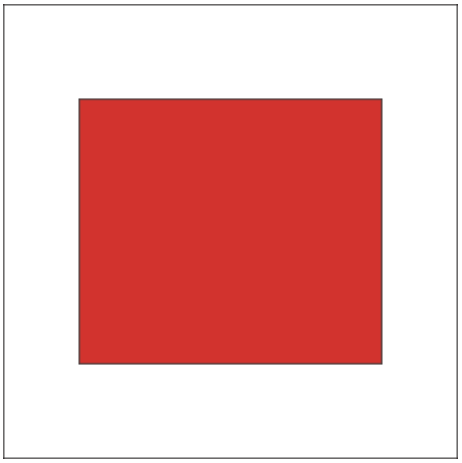


Figure 1: A wrapped figure going nicely inside the text.

   (b) And this is an example of '*Solve for x*:' 15

$$
\begin{aligned}
x+3 &= 2x-4 && \\
x+3+4 &= 2x-4+4 && \text{Add 4 to both sides.} \\
x+7 &= 2x && \text{Combine like terms.} \\
x+7-x &= 2x-x && \text{Subtract x from both sides.} \\
7 &= x && \text{Combine like terms.}
\end{aligned}
$$

   Check your results...

$$
\begin{aligned}
(7)+3 &= 2(7)-4 && \text{Substitute 7 for x.} \\
10 &= 14-4 && \text{Simplify.} \\
10 &= 10 && \checkmark
\end{aligned}
$$

2. What is $1+1$? The quick brown fox jumps over the lazy dog. The quick brown fox jumps over 5

30 points

the lazy dog. The quick brown fox jumps over the lazy dog. Whatever.

2. _____

3. What is $2+2$? 5

3. _____

Solution: 4

4. What is $3+3$? 5

4. _____

Solution: 6

5. What is $4+4$? 5

5. _____

Solution: 8

6. What is $5+5$? 5

6. _____

Solution: 10

7. What is $6+6$? 5

7. _____

Solution: 12

8. What is $7 + 7$? 5

8. _____

Solution: 14

9. Answer the following parts:

   (a) What is $8 + 8$? 5

   (a) _____

   (b) What is $9 + 9$? 5

   (b) _____

   (c) What is $10 + 10$? 5

   (c) _____

10. What is $e^x \; dx \; dx$? 6

10. _____

11. What is $e^{-x} \; dx \; dx$? 6

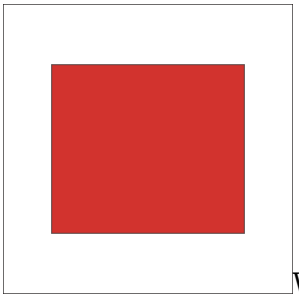
11. _____

12. What is $e^{i\theta} \; d\theta$? 6

12. _____

13. What is $e^{-i\theta} \; d\theta$? 6

13. _____

14.  What is the color of

George Washington's white horse?

(a) Who is buried in Grant's Tomb?

Solution: Once upon a midnight dreary, while I pondered, weak and weary,
Over many a quaint and curious volume of forgotten lore—
While I nodded, nearly napping, suddenly there came a tapping,
As of some one gently rapping, rapping at my chamber door. "'Tis some visitor," I muttered, "tapping at my chamber door—
Only this and nothing more."

(b) And this is an example of '*Solve for x*:'

$$
\begin{aligned}
x+3 &= 2x-4 \\
x+3+4 &= 2x-4+4 && \text{Add 4 to both sides.} \\
x+7 &= 2x && \text{Combine like terms.} \\
x+7-x &= 2x-x && \text{Subtract x from both sides.} \\
7 &= x && \text{Combine like terms.}
\end{aligned}
$$

Check your results...

$$
\begin{aligned}
(7)+3 &= 2(7)-4 && \text{Substitute 7 for x.} \\
10 &= 14-4 && \text{Simplify.} \\
10 &= 10 && \checkmark
\end{aligned}
$$

15. What is $1+1$? The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. Whatever.

15. _____

16. What is $2+2$?

16. _____

Solution: 4

17. What is $3+3$?

17. _____

Solution: 6

18. What is $4+4$?

18. _____

Solution: 8

19. What is $5+5$?

19. _____

Solution: 10

20. What is $6+6$?

20. _____

Solution: 12

21. What is $7 + 7$?

21. _____

Solution: 14

22. Answer the following parts:

(a) What is $8 + 8$?

(a) _____

(b) What is $9 + 9$?

(b) _____

(c) What is $10 + 10$?

(c) _____

23. What is $e^x \, dx \, dx$?

23. _____

24. What is $e^{-x} \, dx \, dx$?

24. _____

25. What is $e^{i\theta} \, d\theta$?

25. _____

26. What is $e^{-i\theta} \, d\theta$?

26. _____

Question:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Points:	25	5	5	5	5	5	5	5	15	6	6	6	6	25	5	5	5	5	5	5	5
Score:																					

44 points