

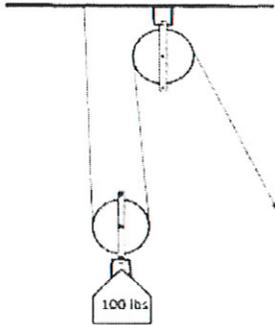
**TECHNICAL /MECHANICAL
TEST III (TMT III)**

**Practice Test 2
Questions**

Section 3

Question 1

Approximately how much force is needed to lift the weight?

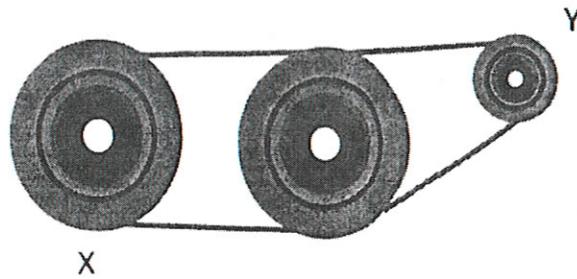


- A) 100 lbs
- B) 50 lbs
- C) 25 lbs
- D) 10 lbs

Question 2

If drive X rotates CW at a speed of 10 rpm how does wheel Y turn?

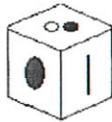
- A) CCW, Faster
- B) CW, Slower
- C) CW, Faster
- D) CCW, Slower



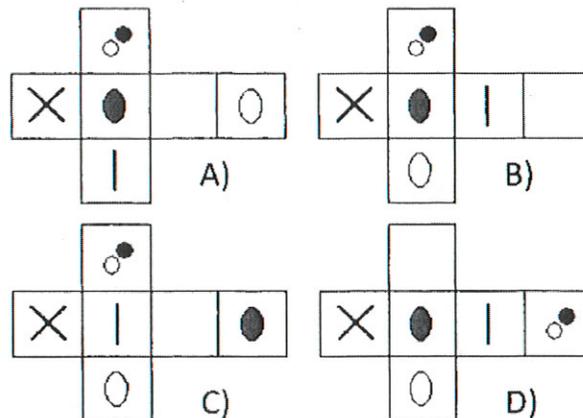
Question 3

Which of the patterns when folded will make the cube shown?

Completed Cube



Patterns



Section 3

Question 4

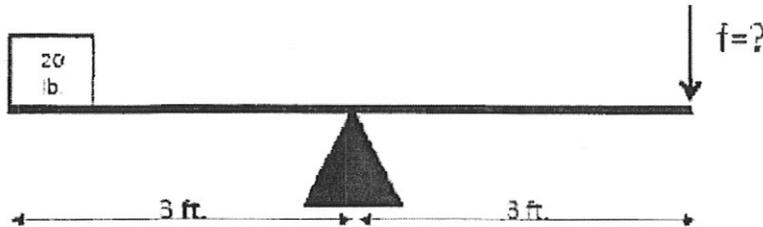
$$w \times d1 = f \times d2$$

w = weight

d1 = distance from fulcrum to weight

f = force needed

d2 = distance from fulcrum to where force is applied



- A) 6.7 lb.
- B) 10 lb.
- C) 20 lb.
- D) 30 lb.

Question 5

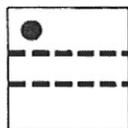
- Spot is bigger than King and smaller than Sugar.
- Ralph is smaller than Sugar and bigger than Spot.
- King is bigger than Ralph.

If the first two statements are true, the third statement is:

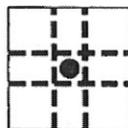
- A. true
- B. false
- C. uncertain

Question 6

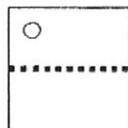
Select the correct shape to complete the statement.



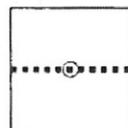
is to



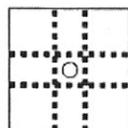
as



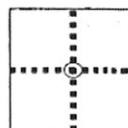
is to



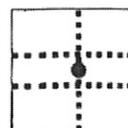
A)



B)



C)



D)

Question 7

Which word does NOT belong with the others?

- A) Book
- B) Index
- C) Glossary
- D) Chapter

Section 3

Question 8

Solve the following question

$$8 - \frac{5 \cdot 3}{9}$$

- A) $\frac{1}{9}$
- B) $5 \frac{2}{3}$
- C) $6 \frac{1}{3}$

Question 9

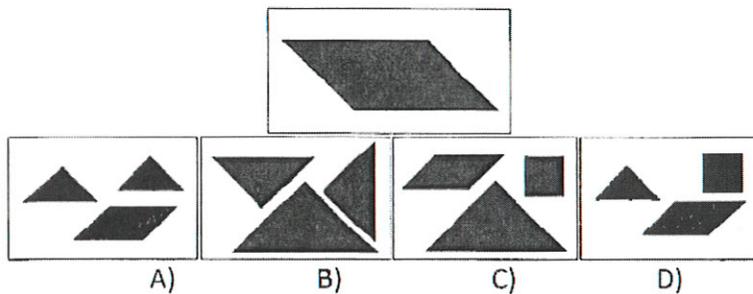
Choose the word that is a necessary part of the underlined word.

Harvest

- A) Autumn
- B) Stockpile
- C) Tractor
- D) Crop

Question 10

Which group of shapes can be assembled to make the shape shown?



Question 11

Complete the series:

A, E, I, M, Q, U, ?

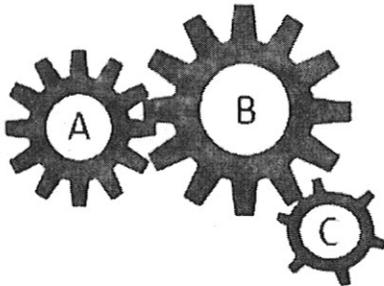
- A) Z
- B) Y
- C) J
- D) T

Section 3

Question 12

Gear B is turning at 10 RPM. Is Gear A turning:

- A) Faster
- B) Slower
- C) Same speed



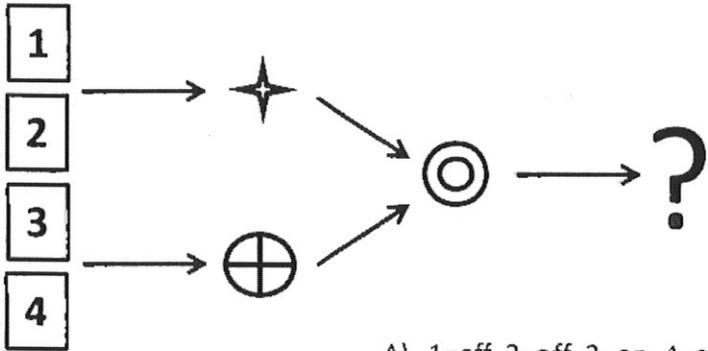
Question 13

Gear B is turning at 10 RPM. Is Gear C turning:

- A) Faster
- B) Slower
- C) Same speed

Question 14

The grid below shows four switches and their effect on the four inputs. Select the right output.

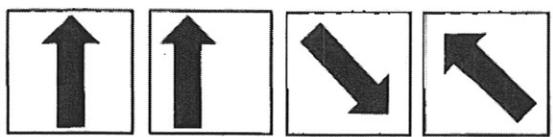
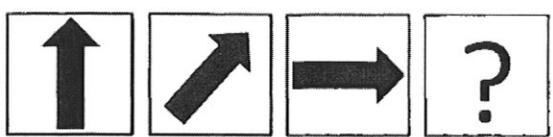


Switch	Function
	Inverts 1 & 2 (on=off, off=on)
	Inverts 3 & 4 (on=off, off=on)
	Inverts 1 & 3 (on=off, off=on)
	Inverts 2 & 4 (on=off, off=on)
<input type="checkbox"/> N	= ON
<input checked="" type="checkbox"/> N	= OFF

- A) 1=off, 2=off, 3=on, 4=on
- B) 1=off, 2=on, 3=off, 4=on
- C) 1=off, 2=off, 3=off, 4=on
- D) 1=off, 2=on, 3=on, 4=off

Question 15

Select the correct shape to complete the statement.



- A)
- B)
- C)
- D)

Question 16

Complete the series



- A) BB B) BB BB C) BB BB BB D) BB BB BB BB

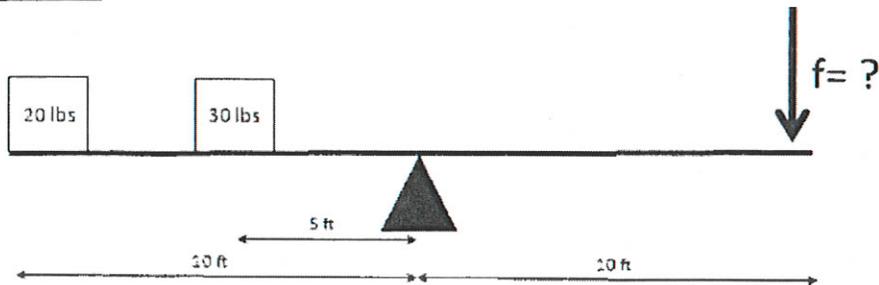
Question 17

Complete the series:

B, E, D, F, ?, H, J, ?, L

- A) I, M
B) M, I
C) I, N
D) J, M

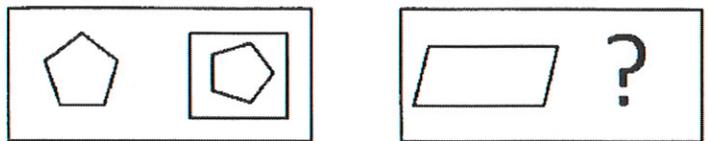
Question 18



- A) 40 lb.
B) 50 lb.
C) 30 lb.
D) 35 lb.

Question 19

Look at the relationship between the two figures of set 1. Establish a similar relationship within set 2 choosing one of the options below



- A) B) C) D)

Section 3

Question 20

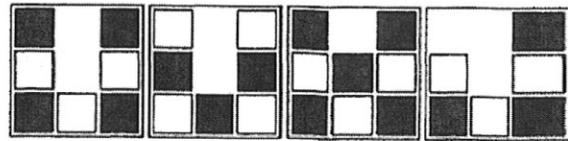
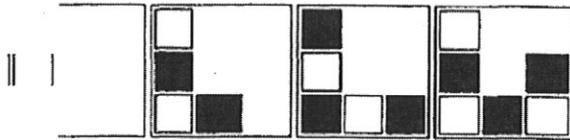
- Linda is older than Eric.
- Ray is older than Linda.
- Eric is younger than Ray

If the first two statements are true, the third statement is

- A) True
- B) False
- C) Uncertain

Question 21

Which figure completes the series?

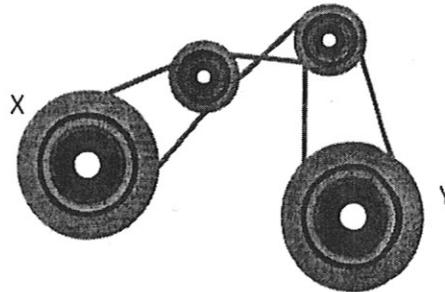


- A)
- B)
- C)
- D)

Question 22

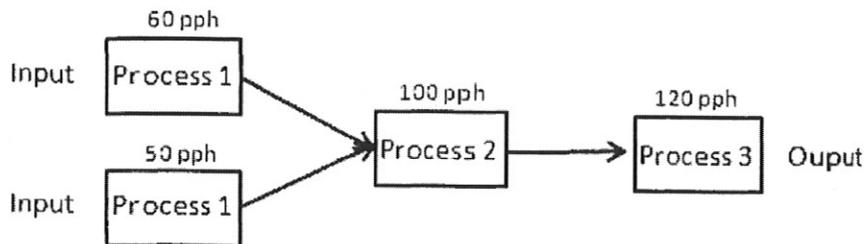
If drive X rotates CCW at a speed of 30 rpm how does wheel Y turn?

- A) CCW, Faster
- B) CW, Slower
- C) CW, Same
- D) CCW, Slower



Question 23

Below is a typical process. Each process is shown with its maximum capability in pieces per hour (pph). If each process operates at its maximum capacity what will be the output at Process 3 in 30 minutes?



- A) 50
- B) 55
- C) 60
- D) 65

Section 3

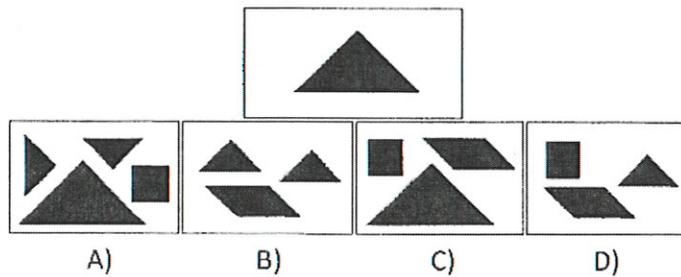
Question 24

Find the odd one out

- A) Echo
- B) Resonance
- C) Tone
- D) Ear

Question 25

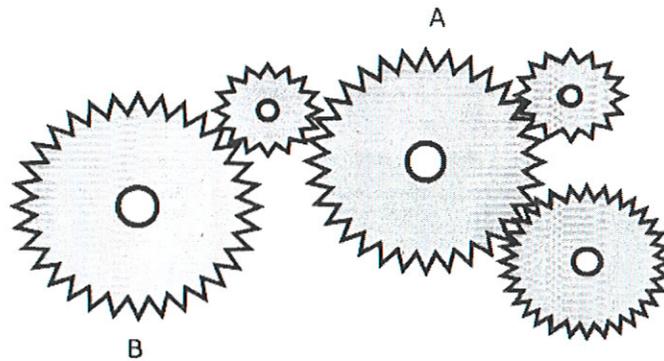
Which group of shapes can be assembled to make the shape shown?



Question 26

Gear B is turning at 20 RPM. Is Gear A turning:

- A) Faster
- B) Slower
- C) Same speed



Question 27

Complete the series:

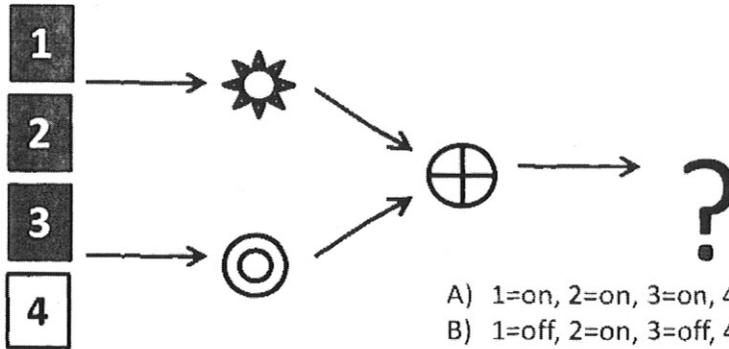
ELFA, GLHA, ILJA, _____, MLNA

- A) OLPA
- B) KLMA
- C) LLMA
- D) KLLA

Section 3

Question 28

The grid below shows four switches and their effect on the four inputs. Select the right output.

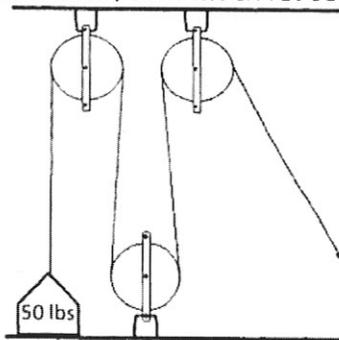


- A) 1=on, 2=on, 3=on, 4=on
- B) 1=off, 2=on, 3=off, 4=on
- C) 1=on, 2=off, 3=off, 4=on
- D) 1=off, 2=on, 3=on, 4=off

Switch	Function
★	Inverts 1 & 2 (on=off, off=on)
⊙	Inverts 3 & 4 (on=off, off=on)
☀	Inverts 1 & 3 (on=off, off=on)
⊕	Inverts 2 & 4 (on=off, off=on)
N	N = ON N = OFF

Question 29

Approximately how much force is needed to lift the weight?



- A) 25 lbs
- B) 50 lbs
- C) 17 lbs
- D) 12 lbs

Question 30

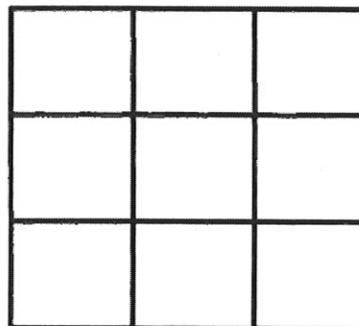
Find the odd one out

- A) Cow: Calf
- B) Dog: Bitch
- C) Lion: Cub
- D) Tortoise: Turtle

Question 31

Identify the number of squares

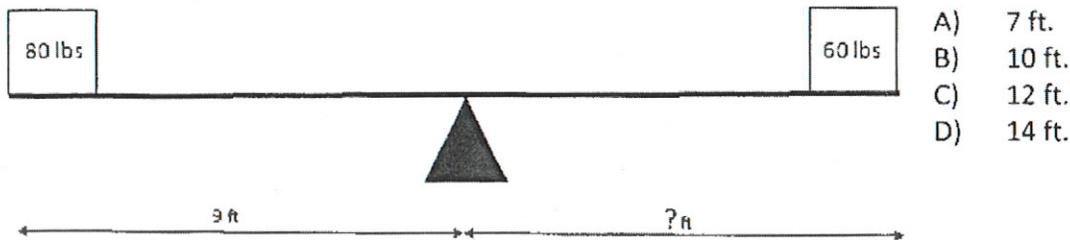
- A) 9
- B) 14
- C) 10
- D) 16



Section 3

Question 32

How far from the fulcrum does the 60 lb. weight have to be to balance the lever



Question 33

Bob and Kate sit on a see-saw. Bob is three feet from the fulcrum and weighs 100 pounds. Kate is 5 feet from the fulcrum and weighs 70 pounds. Which end of the see-saw will be lower?

- A) Bob's end
- B) Kate's end
- C) Both level
- D) Not enough information to decide

Question 34

Complete the series:

BYW, DUX, FQY, _____

- A) HZM
- B) HCZ
- C) HMZ
- D) HZC

Question 35

- A jar of jelly beans contains more red beans than green
- There are more yellow beans than red
- The jar contains fewer yellow jelly beans than green ones

If the first two statements are true, the third statement is

- A) True
- B) False
- C) Uncertain

Section 3

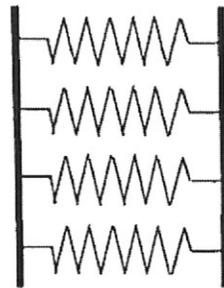
Question 36

Two persons are walking together. One of them says to the other, "Though you are my father, yet I am not your son". What is the relationship between the two?

- A) Father and grand father
- B) Father and son-in-law
- C) Father and son
- D) Father and daughter

Question 37

A force of 5 pounds compresses the springs in series 10 inches. What will the total distance that the springs in parallel are compressed?



- A) 2.5 in.
- B) 5 in.
- C) 7.5 in.
- D) 10 in.

Question 38

Complete the series:

EJO, TYD, INS, XCH, _____

- A) NRW
- B) MRW
- C) MSX
- D) NSX

Question 39

In a family there are husband wife, two sons and two daughters. All the ladies were invited to a dinner. Both sons went out to play. Husband did not return from office. Who was at home?

- A) Only wife was at home
- B) All ladies were at home
- C) Only sons were at home
- D) No one was at home

Section 3

Question 40

Find the odd one out

- A) Copper
- B) Brass
- C) Platinum
- D) Zinc

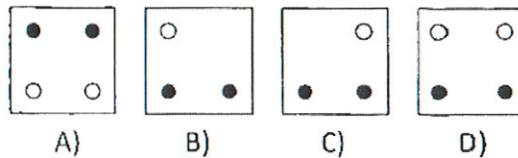
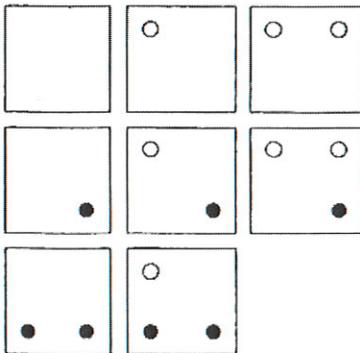
Question 41

A told B that C is his father's nephew. D is A's cousin but not the brother of C. What relationship is there between D and C ?

- A) Father
- B) Sister
- C) Aunt
- D) Mother

Question 42

Which figure completes the series?



Question 43

In the number series: 7, 10, 8, 11, 9, 12, What number comes next?

- A) 7
- B) 10
- C) 12
- D) 13

Section 3

Question 44

Which word does NOT belong with the others?

- A) Dodge B) Flee C) Duck D) Avoid

Question 45

The grid below shows four switches and their effect on the four inputs. Select the right output.

1

2

3

4





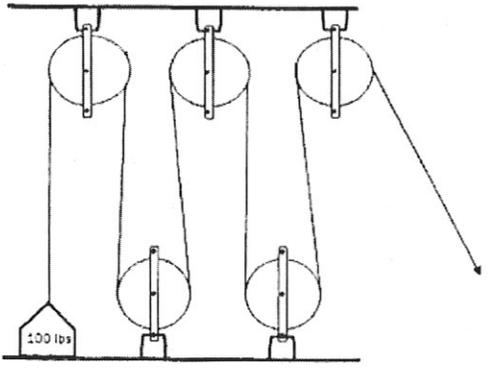
?

A) 1=on, 2=on, 3=on, 4=on
 B) 1=off, 2=on, 3=off, 4=on
 C) 1=on, 2=on, 3=off, 4=off
 D) 1=off, 2=on, 3=on, 4=off

Switch	Function
	Inverts 1 & 2 (on=off, off=on)
	Inverts 3 & 4 (on=off, off=on)
	Inverts 1 & 3 (on=off, off=on)
	Inverts 2 & 4 (on=off, off=on)
<div style="border: 1px solid black; padding: 2px; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">N</div>	= ON
<div style="background-color: black; color: white; padding: 2px; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">N</div>	= OFF

Question 46

Approximately how much force is needed to lift the weight?



- A) 25 lbs
- B) 50 lbs
- C) 20 lbs
- D) 10 lbs

Question 47

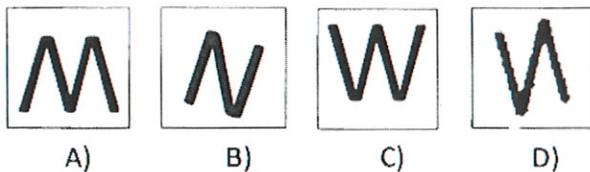
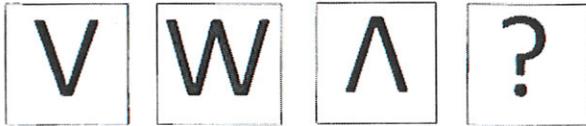
John left home driving east at 50 mph and drove for 6.5 hours. Jimmy left home driving the same direction as John. Jimmy traveled 15 mph slower than John and only traveled for 4 hours. When they both stopped how far away from John was Jimmy?

- A) 200 miles
- B) 165 miles
- C) 185 miles
- D) 190 miles

Section 3

Question 48

Select the correct shape to complete the statement.



Question 49

Read the paragraph below. Select the statement that must be true based on the information in the paragraph.

After hearing the news of the hurricane, Alicia and Max decided to change their vacation plans. Instead of staying at the beach resort, they booked a room at a fancy dude ranch in the mountains. The ranch was a bit more expensive, but several friends had told them wonderful things about the dude ranch and they were relieved to find availability on such short notice.

- A) Alicia and Max take beach vacations every year
- B) The dude ranch is overpriced
- C) It is usually necessary to book way in advance at the dude ranch
- D) Alicia and Max decided to change their vacation plans due to the hurricane

Question 50

In the number series: 16, 4, 1, $\frac{1}{4}$, What number comes next?

- A) $\frac{1}{3}$
- B) $\frac{1}{8}$
- C) $\frac{2}{8}$
- D) $\frac{1}{16}$