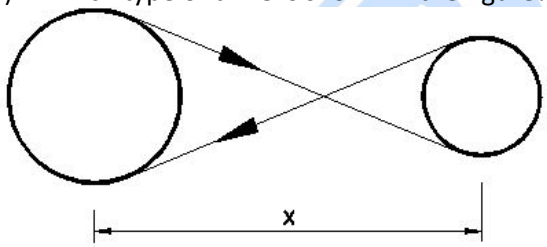
1). Which is the imaginary circle on two matting gears?
(A) Root circle
(B) Pitch circle
(C) Base circle
(D) Addendum circle Correct
Answer: B

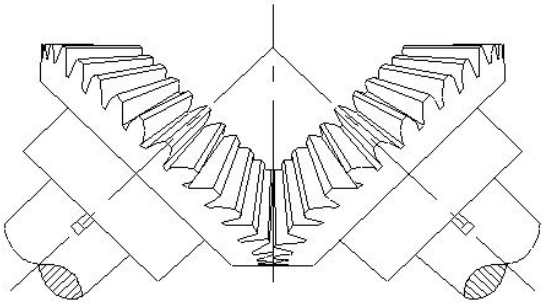
2). In which type of belt drive, the driven shaft will rotate in the opposite direction to the driver shaft?
(A) Stepped drive
(B) Open belt drive
(C) Cross belt drive
(D) Right angled belt drive
Correct Answer: C

3). Which type of drive is shown in the figure?



(A) Stepped drive
(B) Right angled drive
(C) Open belt drive
(D) Cross-belt drive
Correct Answer: D

4). What is the name of the gear shown in the figure?



(A) Spur gear
(B) Mitre gear
(C) Hypoid gear
(D) Herring bone gear
Correct Answer: B

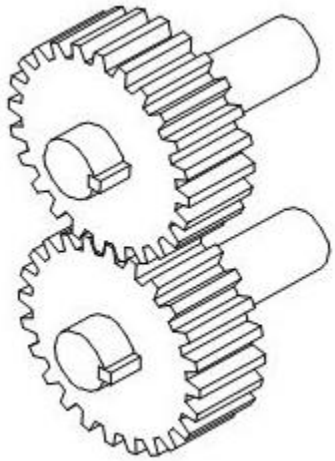
5). Why is a spider coupling typically used for low power drives?
(A) Larger size
(B) Heavy
(C) Rubber spacer
(D) Rigid
Correct Answer: C

6). Which chain drive provides noiseless and uniform drive?
(A) Duplex chain
(B) Toothed chain
(C) Simplex chain
(D) Triple roller type chain
Correct Answer: B

7). Why universal uni-joint coupling is only suitable for remote manual operations?
(A) Provides a soft start
(B) Transmitted low power is not smooth
(C) Used in pairs on cardan shafts
(D) Used to reduce the engine vibration
Correct Answer: B

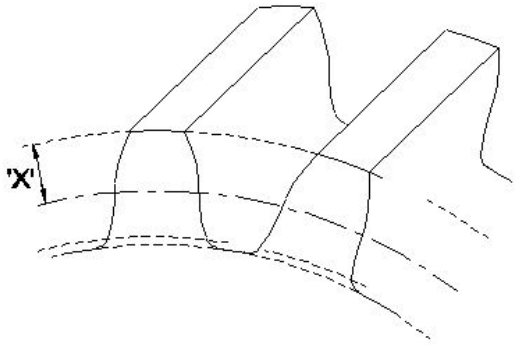
8). Which type of gear drive changes rotary movement to linear movement?
(A) Hypoid
(B) Herring bone
(C) Rack and pinion
(D) Helical gear
Correct Answer: C

9). What is the name of the gear shown in the figure?



(A) Spur gear
(B) Mitre gear
(C) Bevel gear
(D) Hypoid gear
Correct Answer: A

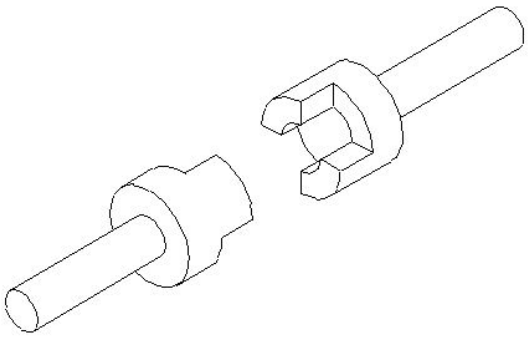
10). What is the name of the part marked as ‘x’ shown in the figure?



(A) Flank
(B) Addendum
(C) Face width
(D) Root circle
Correct Answer: B

11). Where is universal coupling used?
(A) Automobile vehicles
(B) Textiles mills
(C) Compressors
(D) Pumps
Correct Answer: A

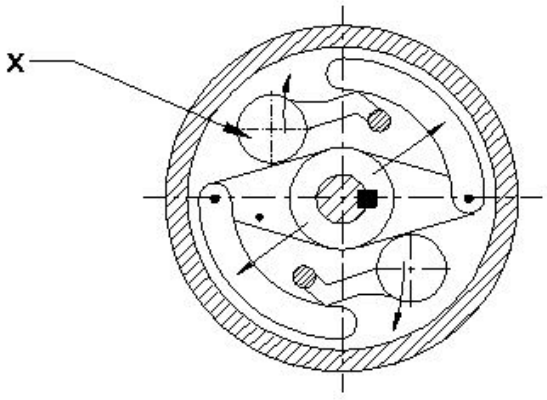
12). What is the name of the clutch shown in the figure?



(A) Air clutch
(B) Dog clutch
(C) Cone clutch
(D) Single plate clutch
Correct Answer: B

13). What is the effect of the disengaged clutch position in a multiplate clutch?
(A) Clutch provides drive
(B) Armature transmits the drive
(C) Transmission gear box starts to run
(D) Transmission gear box brought to rest
Correct Answer: D

14). What is the name of the part marked as 'X' shown in the figure?

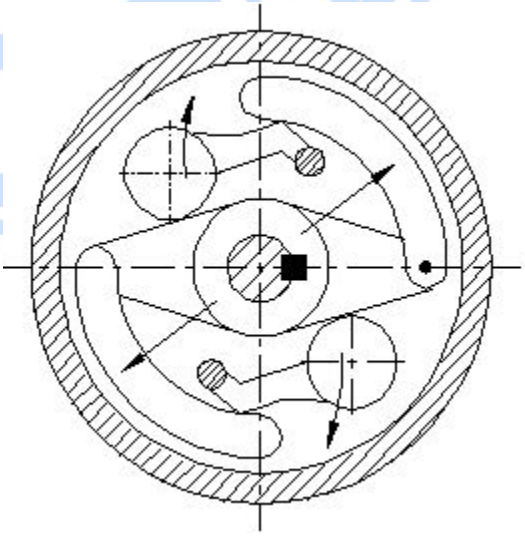


(A) Inner piece
(B) Outer piece
(C) Rubbing surface
(D) Centrifugal weight
Correct Answer: D

15). Which gear is Symmetrical to each other and transmits motion at right angle?
(A) Spur gear
(B) Mitre gear
(C) Helical gear
(D) Hypoid gear
Correct Answer: B

16). What causes excessive tension and additional stress, leading to reduced belt life?
(A) Wrapping angle is big
(B) Tension ratio is higher
(C) Arc of contact is less
(D) Arc of contact is more
Correct Answer: C

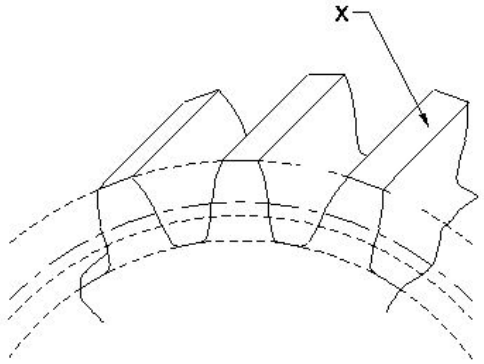
17). What is the name of the clutch shown in the figure?



(A) Air clutch

(B) Cone clutch
(C) Centrifugal clutch
(D) Over riding clutch
Correct Answer: C

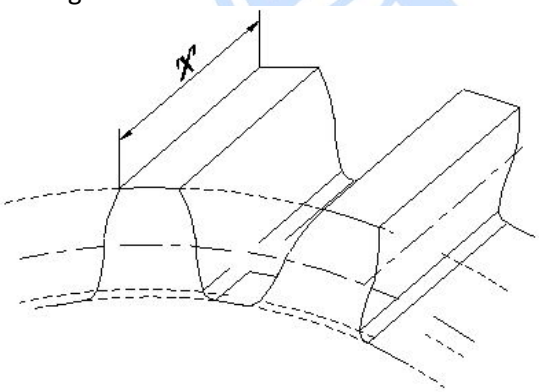
18). What is the name of the part marked as 'X' shown in the figure?



(A) Flank
(B) Top land
(C) Fillet
(D) Face
Correct Answer: B

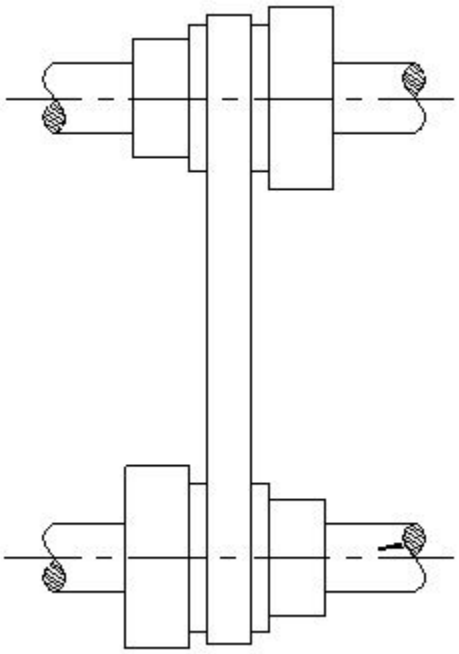
19). Which drive transmits motion at a constant velocity without any creep and slippage?
(A) Rope drive
(B) Gear drive
(C) Pulley drive
(D) Chain drive
Correct Answer: D

20). What is the name of the part marked as 'x' shown in the figure?



(A) Pitch line
(B) Dedendum
(C) Addendum
(D) Face width
Correct Answer: D

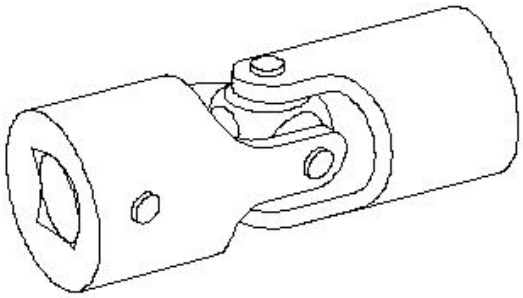
21). Which type of drive is shown in the figure?



(A) Stepped drive
(B) Open belt drive
(C) Right angled drive
(D) Cross-belt drive
Correct Answer: A

22). How the gripping property of the dried belt is improved?
(A) By using Jockey pulley
(B) By applying powdered resin
(C) By Reducing the distance between pulleys
(D) By Increasing the distance between pulleys
Correct Answer: B

23). What is the name of the coupling shown in the figure?



(A) Slip coupling
(B) Plate coupling
(C) Clamp coupling
(D) Universal coupling
Correct Answer: D

24). What happens if a flat pulley is provided with larger crowning?
(A) The arc of contact is more
(B) More power can be transmitted
(C) Easy to shift the belt
(D) Belt will be damaged
Correct Answer: D

25). Why the face of pulley is “Crowned” in power transmission?
(A) Increase the tension
(B) Decrease the tension
(C) Keep the belt centralised
(D) Allows free rotation in pulley
Correct Answer: C