

# Industrial Maintenance Technology: Blueprint Reading for Machinists

Practice and perform safe shop procedures at all times. **BRM1**

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**1** Practice and perform safe shop procedures at all times. **BRM1**

Apply the technical math required for employment opportunities in maintenance. **BRM2**

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**2** Apply the technical math required for employment opportunities in maintenance. **BRM2**

Perform all duties with emphasis on **BRM3**

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**a** integrity **BRM3A**

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**b** responsibility **BRM3B**

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**c** quality **BRM3C**

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**d** discipline **BRM3D**

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**e** teamwork **BRM3E**

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Demonstrate competency in mathematical fraction and decimal problems. **BRM4**

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**4** Demonstrate competency in mathematical fraction and decimal problems. **BRM4**

Identify the alphabet of lines. **BRM5**

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**5** Identify the alphabet of lines. **BRM5**

Identify multiple views. **BRM6**

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**6** Identify multiple views. **BRM6**

Arrange multiple views. **BRM7**

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**7** Arrange multiple views. **BRM7**

**Arrange two-view drawings.** BRM8

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**8 Arrange two-view drawings.** BRM8

**Identify one-view drawings.** BRM9

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**9 Identify one-view drawings.** BRM9

**Arrange and identify auxiliary views.** BRM10

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**10 Arrange and identify auxiliary views.** BRM10

**Demonstrate the use of size and location dimensions.** BRM11

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**11 Demonstrate the use of size and location dimensions.** BRM11

**Demonstrate proper dimensions of cylinders and arcs.** BRM12

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**12 Demonstrate proper dimensions of cylinders and arcs.** BRM12

**Size dimensions of holes and angles.** BRM13

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**13 Size dimensions of holes and angles.** BRM13

**Locate dimensions for centering of holes, points, and centers.** BRM14

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**14 Locate dimensions for centering of holes, points, and centers.** BRM14

**Interpret the base line dimensions on drawings.** BRM15

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**15 Interpret the base line dimensions on drawings.** BRM15

**Calculate tolerances.** BRM16

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**16 Calculate tolerances.** BRM16

**Identify labeling of various screw threads.** BRM17

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**17 Identify labeling of various screw threads.** BRM17

**Calculate tapers and machined surfaces.** BRM18

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**18 Calculate tapers and machined surfaces.** BRM18

**Dimension parts using shop notes.** BRM19

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**19 Dimension parts using shop notes.** BRM19

**Identify half, full, and removed sections.** BRM20

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**20 Identify half, full, and removed sections.** BRM20

**Interpret ordinate and tabular dimensions.** BRM21

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**21 Interpret ordinate and tabular dimensions.** BRM21

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**Set tolerances using geometric dimensioning techniques.** BRM22

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**22 Set tolerances using geometric dimensioning techniques.** BRM22

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**Sketch parts with irregular shapes.** BRM23

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**23 Sketch parts with irregular shapes.** BRM23

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**Sketch oblique views of various parts.** BRM24

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**24 Sketch oblique views of various parts.** BRM24

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**Sketch and dimension shop drawings.** BRM25

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**25 Sketch and dimension shop drawings.** BRM25

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**Demonstrate visualizing techniques of multiple views.** BRM26

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**26 Demonstrate visualizing techniques of multiple views.** BRM26

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**Identify line types used in combinations.** BRM27

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**27 Identify line types used in combinations.** BRM27

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**Identify standards listings on working drawings.** BRM28

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**28 Identify standards listings on working drawings.** BRM28

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**List procedural machining and construction requirements from notations on working drawings.** BRM29

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**29 List procedural machining and construction requirements from notations on working drawings.** BRM29

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**List proper procedure for construction of various machining processes.** BRM30

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**30 List proper procedure for construction of various machining processes.** BRM30

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**Determine proper thread series and types for duty specific assembly.** BRM31

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**31 Determine proper thread series and types for duty specific assembly.** BRM31

**Specify duty specific uses of contour notes.** BRM32

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**32 Specify duty specific uses of contour notes.** BRM32

**Determine overall measurements of contoured parts.** BRM33

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**33 Determine overall measurements of contoured parts.** BRM33

**Explain various terms involved in multiple sections.** BRM34

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**34 Explain various terms involved in multiple sections.** BRM34

**Identify usages for chamfers and interpret sizes.** BRM35

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**35 Identify usages for chamfers and interpret sizes.** BRM35

**Define various chamfer terms.** BRM36

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**36 Define various chamfer terms.** BRM36

**Determine the sizing procedures of necks and grooves.** BRM37

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**37 Determine the sizing procedures of necks and grooves.** BRM37

**Identify various keyway and key seat standards.** BRM38

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**38 Identify various keyway and key seat standards.** BRM38

**Identify usage of geometric symbols.** BRM39

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**39 Identify usage of geometric symbols.** BRM39

**Define terms relating to geometric tolerancing.** BRM40

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**40 Define terms relating to geometric tolerancing.** BRM40

**Set standards and tolerances using geometric dimensioning** BRM41

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**41 Set standards and tolerances using geometric dimensioning** BRM41

**Set axis coordinates on numerical control prints.** BRM42

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**42 Set axis coordinates on numerical control prints.** BRM42

**Determine axis coordinates on ordinate**

**43 Determine axis coordinates on ordinate and tabular prints.** BRM43

**and tabular  
prints. BRM43**

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**Identify casting and  
forging terms. BRM44**

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**44 Identify casting and forging terms. BRM44**

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**Calculate bend setbacks  
in sheet metals and  
plate steels. BRM45**

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**45 Calculate bend setbacks in sheet metals and plate steels. BRM45**

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**Identify parts and  
materials from various  
reference books and  
manuals. BRM46**

**46 Identify parts and materials from various reference books and manuals. BRM46**