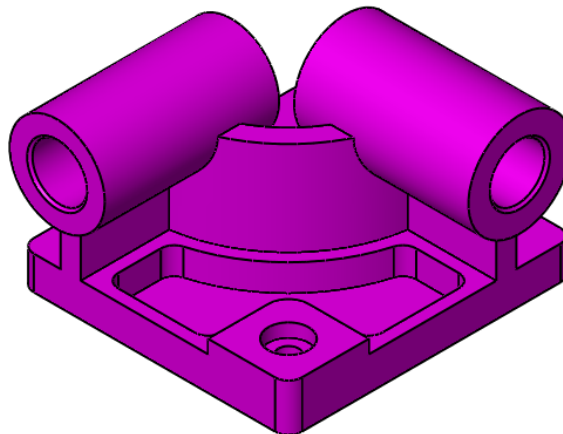
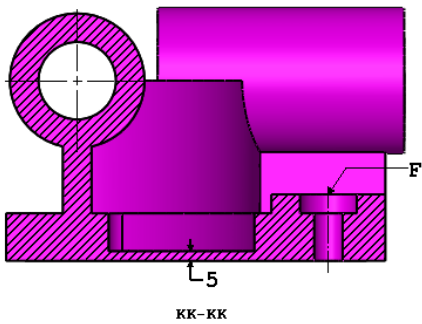
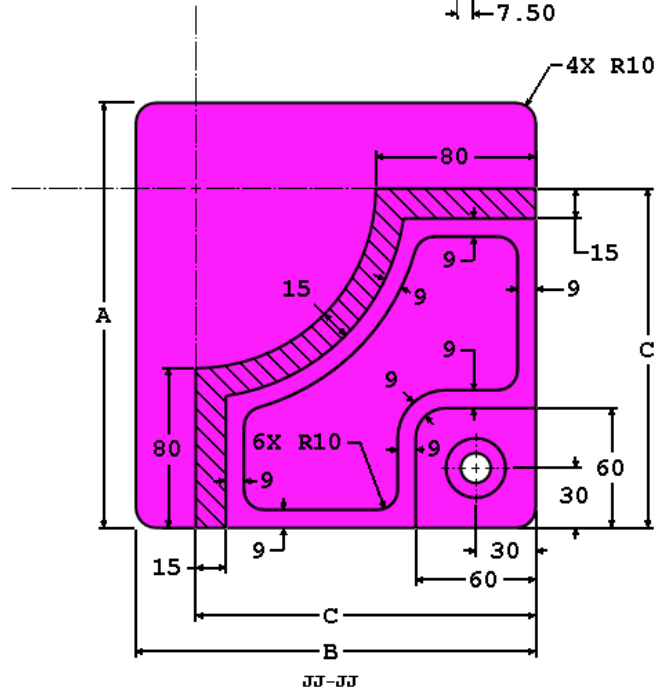
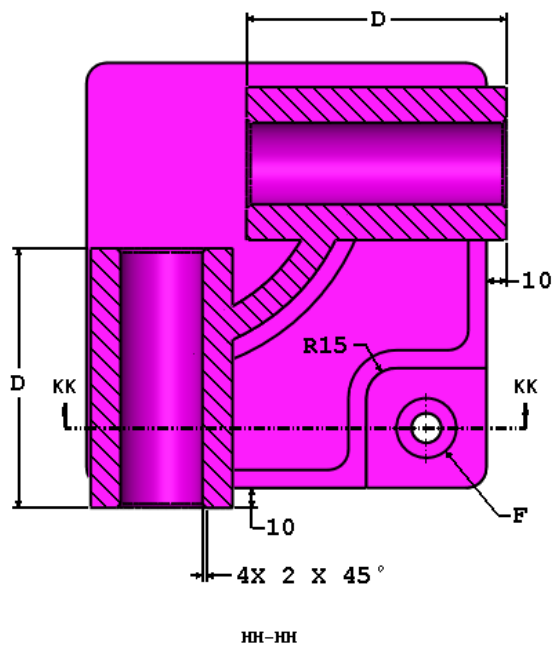
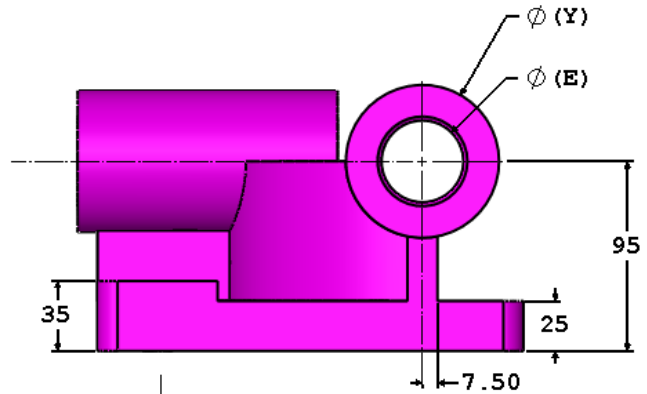
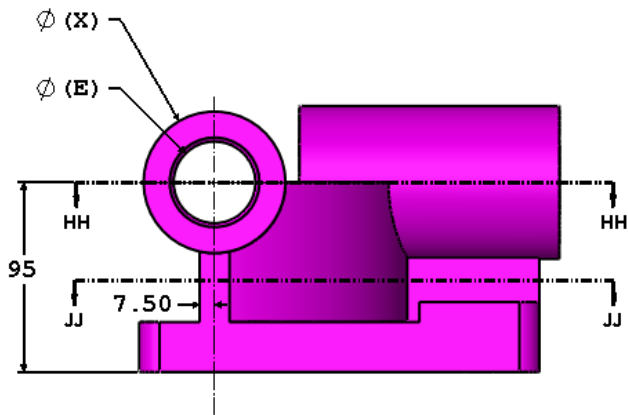


Test Questions

This section will give you a general idea of Segment 1 of the CSWP Exam. These images are to be used to answer Questions #1 – 3.



1. Stage 1 – Initial Part

Build this part in SOLIDWORKS.

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Part origin: Arbitrary

Material: Alloy Steel

Density = 0.0077 g/mm³

All holes through all unless shown otherwise

Use the following parameters and equations which correspond to the dimensions labeled in the images:

A = 213 mm

B = 200 mm

C = 170 mm

D = 130 mm

E = 41 mm

F = Hole Wizard Standard: Ansi Metric Counterbore

Type: Hex Bolt – ANSI B18.2.3.5M

Size: M8

Fit: Close

Through Hole Diameter: 15.00 mm

Counterbore Diameter: 30.00 mm

Counterbore Depth: 10.00 mm

End Condition: Through All

X = A/3

Y = B/3 + 10mm

Hint 1: The dimensions that are to be linked or updated and are variable will be labeled with letters. Any dimensions that are simple value changes or refer to new features from one stage to another will be circled in the images.

Hint 2: To save the most time, make use of linked dimensional values and equations.

Measure the mass of the part.

What is the mass of the part (grams)?

- a) 14139.65
- b) 14298.56
- c) 15118.41
- d) 14207.34

2. Update parameters of the initial part.

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Part origin: Arbitrary

Material: Alloy Steel

Density = 0.0077 g/mm³

All holes through all unless shown otherwise

Use the following parameters and equations which correspond to the dimensions labeled in the images:

A = 225 mm

B = 210 mm

C = 176 mm

D = 137 mm

E = 39 mm

F = Hole Wizard Standard: Ansi Metric Counterbore

Type: Hex Bolt – ANSI B18.2.3.5M

Size: M8

Fit: Close

Through Hole Diameter: 15.00 mm

Counterbore Diameter: 30.00 mm

Counterbore Depth: 10.00 mm

End Condition: Through All

X = A/3

Y = B/3 + 10mm

Hint 1: The dimensions that are to be linked or updated and are variable will be labeled with letters. Any dimensions that are simple value changes or refer to new features from one stage to another will be circled in the images.

Hint 2: To save the most time, make use of linked dimensional values and equations.

What is the mass of the part (grams)?

3. Update parameters of the initial part.

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Part origin: Arbitrary

Material: Alloy Steel

Density = 0.0077 g/mm³

All holes through all unless shown otherwise

Use the following parameters and equations which correspond to the dimensions labeled in the images:

A = 209 mm

B = 218 mm

C = 169 mm

D = 125 mm

E = 41 mm

F = Hole Wizard Standard: Ansi Metric Counterbore

Type: Hex Bolt – ANSI B18.2.3.5M

Size: M8

Fit: Close

Through Hole Diameter: 15.00 mm

Counterbore Diameter: 30.00 mm

Counterbore Depth: 10.00 mm

End Condition: Through All

$X = A/3$

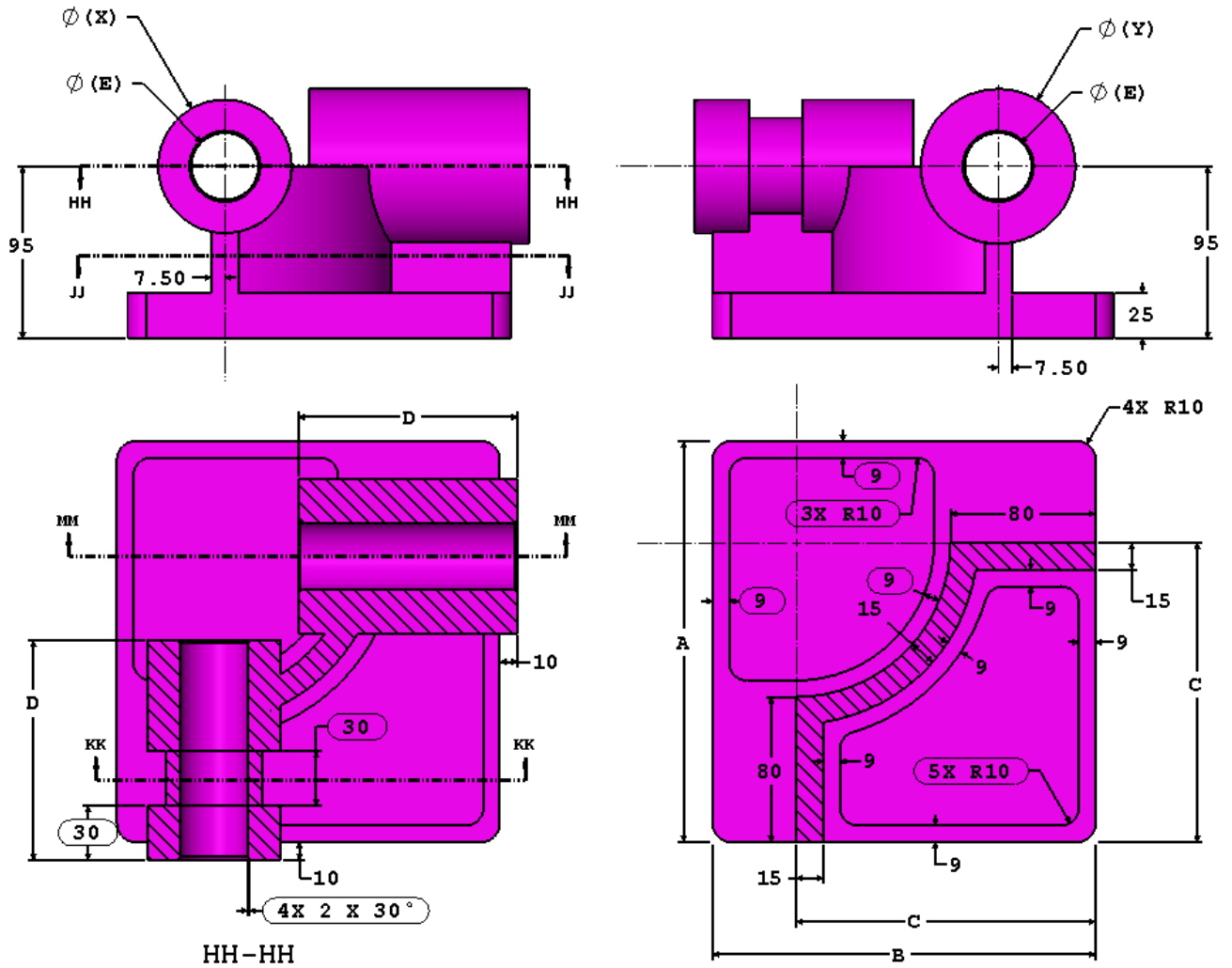
$Y = B/3 + 10\text{mm}$

Hint 1: The dimensions that are to be linked or updated and are variable will be labeled with letters. Any dimensions that are simple value changes or refer to new features from one stage to another will be circled in the images.

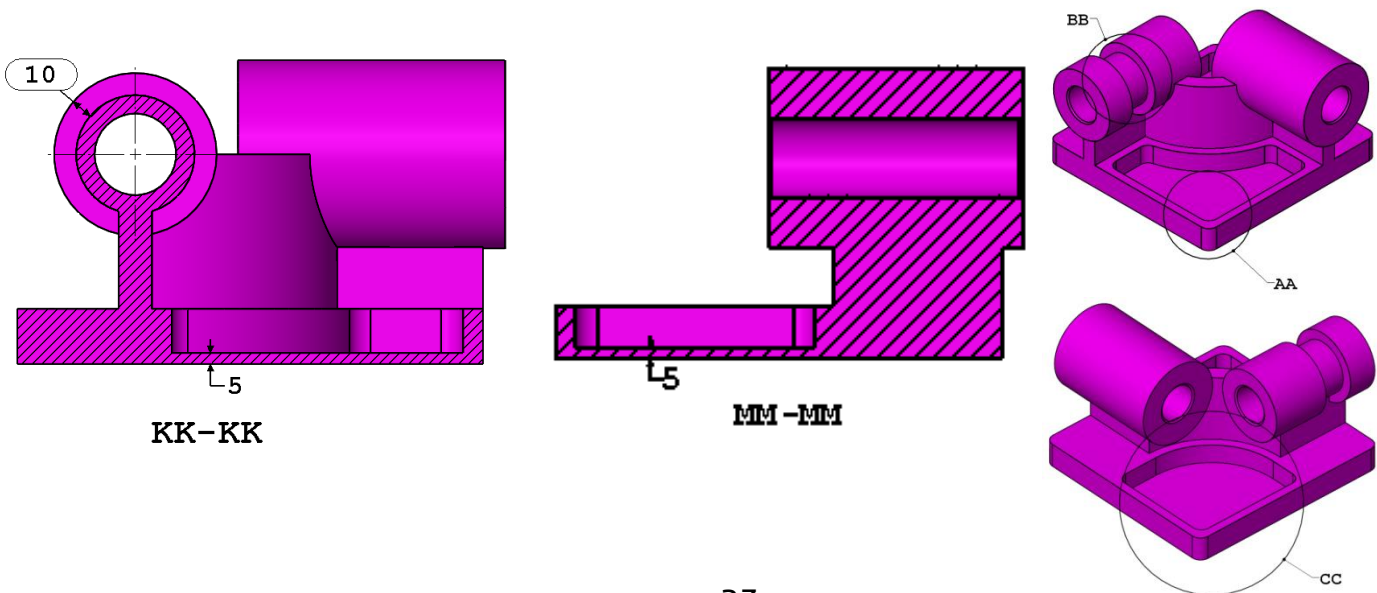
Hint 2: To save the most time, make use of linked dimensional values and equations.

What is the mass of the part (grams)?

These images are to be used to answer Questions #4 and 5.



4. Stage 2 – Modify



Modify the part using the following dimensions.

Note: The changes from the initial part are concentrated in areas AA, BB and CC shown in the images.

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Part origin: Arbitrary

Material: Alloy Steel

Density = 0.0077 g/mm³

All holes through all unless shown otherwise

Use the following parameters and equations which correspond to the dimensions labeled in the images:

$$A = 221 \text{ mm}$$

$$B = 211 \text{ mm}$$

$$C = 165 \text{ mm}$$

$$D = 121 \text{ mm}$$

$$E = 37 \text{ mm}$$

$$X = A/3$$

$$Y = B/3 + 15\text{mm}$$

Note: The equation for Y has changed from the initial part.

Hint 1: The dimensions that are to be linked or updated and are variable will be labeled with letters. Any dimensions that are simple value changes or refer to new features from one stage to another will be circled in the images.

Hint 2: To save the most time, make use of linked dimensional values and equations.

Measure the mass of the part.

What is the mass of the part (grams)?

- a) 13095.40
- b) 13206.40
- c) 13313.35
- d) 13395.79

5. Stage 2 – Update Parameters

Unit system: MMGS (millimeter, gram, second)

Decimal places: 2

Part origin: Arbitrary

Material: Alloy Steel

Density = 0.0077 g/mm³

All holes through all unless shown otherwise

Use the following parameters and equations which correspond to the dimensions labeled in the images:

$$A = 229 \text{ mm}$$

$$B = 217 \text{ mm}$$

$$C = 163 \text{ mm}$$

$$D = 119 \text{ mm}$$

$$E = 34 \text{ mm}$$

$$X = A/3$$

$$Y = B/3 + 15 \text{ mm}$$

Hint 1: The dimensions that are to be linked or updated and are variable will be labeled with letters. Any dimensions that are simple value changes or refer to new features from one stage to another will be circled in the images.

Hint 2: To save the most time, make use of linked dimensional values and equations.

Measure the mass of the part.

What is the mass of the part (grams)?

END OF TEST

Answer Key

1. d) 14207.34
2. 16490.45
3. 15100.47
4. b) 13206.40
5. 14208.00

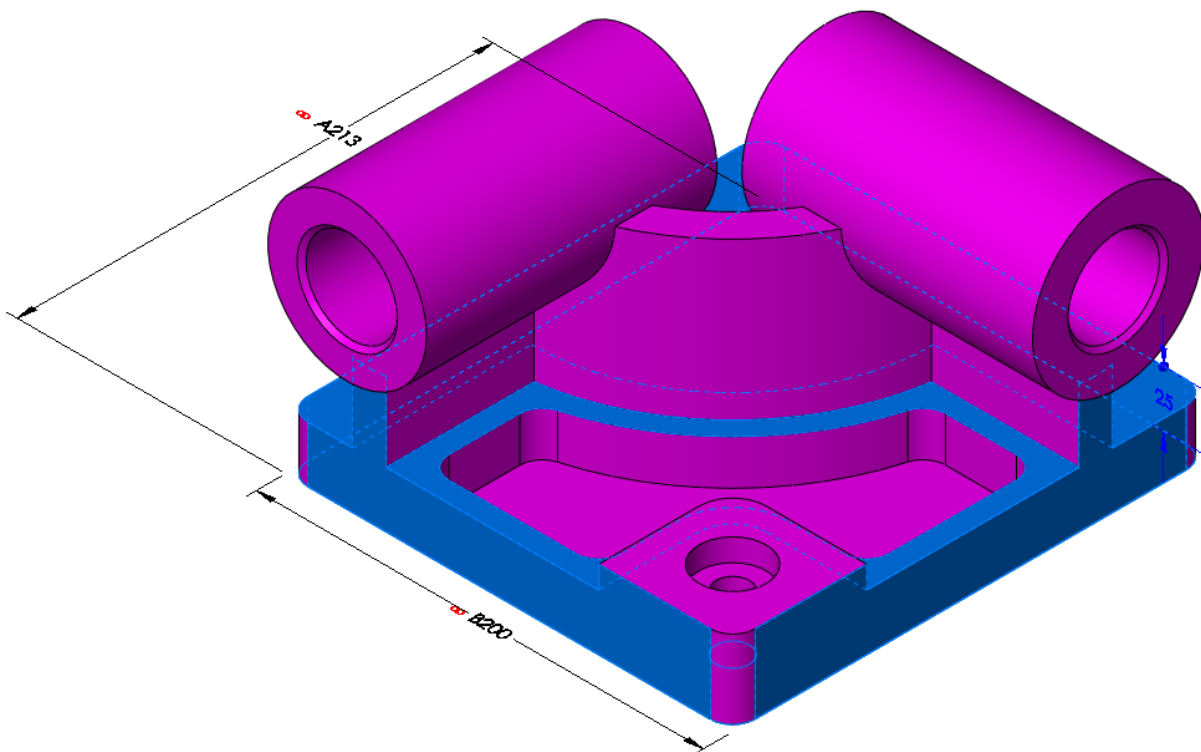
Hints and Tips

DISCLAIMER: IT IS UP TO YOU TO RESEARCH THESE HINTS. BEING A PROFESSIONAL LEVEL CERTIFIED SOLIDWORKS USER SHOULD ALSO INCLUDE THE ABILITY TO RESEARCH SOLIDWORKS FUNCTIONALITY. CONSULT HELP, YOUR VARS, THE ON-LINE FORUMS OR BLOGS. NO ANSWERS WILL BE SHARED BY THE CERTIFICATION TEAM!

Hint 1: Use linked (also known as “shared values”) dimensions to manage the dimensions that are to be the same in each stage. This will ensure that the dimensions that are to be linked together in value stay linked together.

Hint 2: Change the label of the dimensions in your part to A, B, C, D, etc. to visually keep track of which dimensions need to be changed.

Hint 3: As an alternative to Hint #2, you can also use the Design Table to manage the changing parameters.



Frequently Asked Questions

Below is a series of common questions regarding SOLIDWORKS Certifications. To peruse more FAQs, please visit the SOLIDWORKS Certification FAQ page under **Home > Support > Certification > FAQ**.

1. What is the Certified SOLIDWORKS Professional (CSWP) exam?

The CSWP exam is a comprehensive, non-proctored online exam that tests an individual's ability to design and analyze parametric parts and movable assemblies using a variety of complex features in SOLIDWORKS, including design validation tools. A Certified SOLIDWORKS Professional is an individual that has successfully passed this exam.

2. What resources do I need to take the CSWP?

The CSWA/P test is an on-line test that can be taken on any computer that has SOLIDWORKS running and a connection to the Internet. **You are responsible for providing your own working copy of SOLIDWORKS. A commercial license of SOLIDWORKS or the SOLIDWORKS Student Edition will be adequate for the exams.**

The test runs in its own client window separate from SOLIDWORKS. You can either run the exam software on the same computer as your SOLIDWORKS software or in a separate computer next to the one running SOLIDWORKS. Please note that if you are taking the test on a separate computer that you have some means to transfer files from the computer running the testing client to the computer running SOLIDWORKS. Dual monitors are recommended but not required.

As stated above, an internet connection is required for the CSWA/P exams. At this point there are no provisions for a stand-alone exam.

3. What is the policy on retaking the CSWA/P?

There is a 30-day waiting period before retaking the CSWA and any Advanced CSWP exam. There is a 14-day waiting period before retaking any CSWP segment exam. Also, the user will be required to purchase another exam credit to retake the test.

4. What do I receive when I pass the exam?

You will receive certificates for each exam that you pass. You receive an email that directs you to our electronic certificate access page. There you can login and download your electronic certificate(s) and electronic business card logo(s); CSWP's also receive discounts to partner products and SOLIDWORKS World events. For more information refer to www.solidworks.com/cswp.

5. Can the exam be paused?

No. Once started, exams cannot be paused.

6. I took the exam and my Internet connection failed when the test ended. How do I report my results now?

The tester software will retry to connect for ~2 minutes. If the connection is still not available, an error message will be displayed and a TXT file will be saved on your desktop. The name of the file is: Tangix_TesterPro_Error_Date_Time.

Please send this file to support@tangix.com

7. Will my answers be lost if my computer crashes? Will I lose my testing credit/have to pay again if my computer crashes?

You will have to start the examination over and no refund will be available. Once you click 'take exam' your exam credit will be redeemed and we cannot refund your payment or voucher. If your computer crashes, your answers are not recoverable.

8. Which commercial version of the software should I use to take the CSWP exams?

For all exams, the minimum version necessary is listed on the information page of that exam. Please go to <http://www.solidworks.com/certification> and click on the individual exam information page links on the left.

9. Will a certificate be mailed out to me once I pass an exam?

SOLIDWORKS no longer mails out certificates to individuals who have passed an exam. We have made it a simple download that you can print from your computer so you no longer have to wait to receive it. To print your certificate, simply visit www.virtualtester.com/solidworks/user.php. On that page, simply click

the "Print My Certificate" button and follow the on-screen instructions. Please note that not all exams have printable certificates.

Helpful Sites

SOLIDWORKS Home:

www.SOLIDWORKS.com

SOLIDWORKS Resource Center:

<http://www.SOLIDWORKS.com/sw/resources.htm>

SOLIDWORKS YouTube Channel:

<https://www.youtube.com/user/SOLIDWORKS>

MySOLIDWORKS:

my.SOLIDWORKS.com

Training Pages:

<http://www.SOLIDWORKS.com/sw/support/software-training-certification.htm>